

# SEQUENCE LISTING

<110> Mendrick, Donna  
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<120> Molecular Toxicology Modeling

<130> 44921-5038-US

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<150> US 60/222,040

<151> 2000-07-31

<150> US 60/222,880

<151> 2000-11-02

<150> US 60/290,029

<151> 2001-05-11

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<151> 2001-06-06

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<151> 2001-06-19

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<151> 2001-07-09

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<170> PatentIn Ver. 2.1

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<213> Rattus norvegicus

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<213> *Rattus norvegicus*

<220>

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<213> *Rattus norvegicus*

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gagtgcgggg atgcggtgaa caaacataca aagtgagaat tcttgcttca gtgaatatta 240  
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cgtctgataa attaactctg ctgtaacctt tggatgaaat gcaaggaggc agtgcccggg 180
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<213> Rattus norvegicus

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<400> 9

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gatcacttga gaggtgggtc cagagctggg gaaagaagag ccgcaggcag agtcagaagc 180
cagagtctgc agccaggagg tcttcctaaa acaacctcag ccggtcacag cccaaacgac 240
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cagatggtac agaatttctt atttcttgaa gactctgtgg ttgaccactt cttcattagt 300
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 ctgtctcaaa gcattttttt ttacatcctt cctcaacagt aagtattaat tatcaatcca 300  
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<212> DNA  
<213> Rattus norvegicus

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<220>  
<221> unsure  
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<213> Rattus norvegicus

<220>  
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<212> DNA

<213> Rattus norvegicus

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<212> DNA

<213> Rattus norvegicus

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<211> 616

<212> DNA

<213> Rattus norvegicus

<220>

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616

&lt;210&gt; 21

&lt;211&gt; 588

&lt;212&gt; DNA

&lt;213&gt; Rattus norvegicus

&lt;220&gt;

&lt;223&gt; Genbank Accession No. AA799729

&lt;400&gt; 21

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588

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&lt;211&gt; 616

&lt;212&gt; DNA

&lt;213&gt; Rattus norvegicus

&lt;220&gt;

&lt;223&gt; Genbank Accession No. AA799744

&lt;400&gt; 22

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616

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&lt;212&gt; DNA

&lt;213&gt; Rattus norvegicus

&lt;220&gt;

&lt;223&gt; Genbank Accession No. AA799766

&lt;400&gt; 23





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gaccctgcac ggaggtggtg atgggggctt acaggcatag ggcatgggtg agggagtgg 180  
atgaccgccc cccccccaca cagcccagac cttttaagct actaggtctt tcctctgtaa 240  
gaggagaggt cctgggtgac aggagtccct gggacctcat caccttcctc ctaagtcccc 300  
ttctcttgcc cggggagaca agcaaaaactg aaccgtaacc tgctaaacca gcctcaatct 360  
ctgtgctcgg tggatggtga ctaggcactt aaattgtgtg gccagtgcaa caggggaatg 420  
atttccaatc acatagtcaa atggactgat tgatacaacc acatgacgtc actgtattgg 480  
ctcatgcatc tagagagcct gggagaagca aaccataagg tcctgggcag aacccccggc 540  
acaaagcaaa tgcggttata ttcagggtcc taagtcaggc caactcattt ccaagaagga 600  
ccaatgtcat gg 612

<210> 28  
<211> 599  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA800169

<400> 28  
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attatcatca agatgggaaa catgggcagt actggcactg ctgagagttc tacatcttgt 180  
tccaaaggaa accagaagac tgtcttccag gcagctagga gaaggtctca aagctcactt 240  
ccacagtgtc gcacttcctc caacaagtcc acactactaa tagtgccatt ctctgggcca 300  
agcatattca aacacatgag tcgatggggg ccaaacctct tcaaaccact acaagtagaa 360  
ttctcatgaa atatgacttc atgattgcta gactctaata caggattttt catcttgtct 420  
tttactattc tcagtataat caaacactga aatattttact tatgtgacta tataagtcac 480  
acacaaaaat gtaaaactaac attaattagg aaaattttca agataaatta cttagaaata 540  
atttttataa tcccaacact taggaggcaa aaagcaagta agtgtaactt ttttcccc 599

<210> 29  
<211> 613  
<212> DNA  
<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA800243

<400> 29

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cctgggtacc accaccaaac cccgttcctt cctctgacat cccacagcct gtaacagatg 180
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aaccgcagca gactccttaa caaggccttg aagcttggtc agcggaatc atacgacact 420
gagtacatct catacatggt ggctttgaca ttgagacagc cgaggaagtc cttgggattc 480
agcctgtata ggtcgaaggt gactctggct attcctgact tctttgtttg tgtgcagaca 540
tacttattgc cgggtgtcca tttctgtccc ttttccaaga tcatgaagtg tgtgttgtct 600
cttaggtgtc gaa 613
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<210> 30

<211> 560

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA800318

<400> 30

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gccagttcct aaggctggaa gtggctaggg caggcagtggt cgaggaaata gctggatgag 180
ctgaagcttg ggtggcagtg cttactcaag cctgactcct gcctgtctca ggccctgggg 240
tcatatacac ggcccatgaa gactgggaac ttgtgtcgct ggtcccagag caggaagagg 300
aaaggctgct gcacctcaaa gatgagtaag tttcgggcca cggagatggt ggaggctgag 360
gctgcttcca cacctgtctc tgtcagttcc aacaccgtct cgtgtttcat ggaagacacc 420
tgaagatctg ggtcctcagt cagcccacac aggttgagat cgtaagtga gtcagaagaat 480
tccagtttct ccatgattga cagcatgtct tggatgtctt ttactttaat gcgaggcatc 540
atcacgtaag tgggctgaaa 560
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<210> 31

<211> 560

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA800339

<400> 31

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gcaatgttga ggtctactgt tacaaaatcc aagttaatat ttcccttacc tagatgctca 120
agagagcagt ctagctttgt tattttccac cccctcccta gaccagctc agaagttgct 180
cgggactact agctaccatc tgettaacct tctcaggcaa gagcctaggc agcttctagt 240
tatacgaatt caggctcaga gcctcacagg ttaaaaacaa ggctggagat gccctagggc 300
agaaagttgg gtaacagggt ctatgtcctt gtgcggagcc ctccctgtgg ggattggagg 360
gatgggacac agtgtgcatg aggacgggag aacaaagagc ctgggacaat ttatgttata 420
ctgaactgtc cattcggttc attcattccg ctaaaccgtt cataaaatta agagtattct 480
gaatggccta tgtctttctt ctctccccag gactcctaga agcctgcact ttccacaaaa 540
gttaaaatcc aagaggtggg 560
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<210> 32

<211> 678

<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA800429

<400> 32  
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tattgaacaa gcttctgctt tatttattgc aaatgttact ggatgacttt ctaggtaaag 180  
tggtcagggt tggagctgta tgaatctgt aatcctagat ctgtcttttag gaaaccaata 240  
ctgttgcaaga ctctcctgtg gtatactaag cctcaaaatg acctcttctt aaaaggacct 300  
accaaaagtgt tacttggtgtc tggagagaag gttcagtagt tactaactag cacctgttct 360  
atagacccca tattccattc ccaccaccca tatgggttcaa agccaacagg aattcaaagt 420  
tcatagtacc ttacaccccc tgctggcctc tcttggcact acagagacac atgcaaatga 480  
agccttgata ctcatcaaat aaaattaagg attaaagaca aattttggtt tcatgaaagt 540  
aattctactt ccattcaaca ttttacaag aataatggga ttactcatt ttcataatta 600  
gcctttggag gcagatataa gaatttaatt tatgttttga tagtacagaa taaagactct 660  
aaatatgttc tcacacaa 678

<210> 33  
<211> 572  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA800551

<400> 33  
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tgctatacta ccaacattaa attgcagtta cggtggagcc taagttgaat agaaagcctg 180  
taacagaccc aaggaacgcc tttcctggac tatacatgca aatcacctct caacatacag 240  
atctcacttt aatttgtaag ttacttgggc tttggaagtc actacaccca agcaagggcc 300  
tttggaagag ggaagaaagt gatgttttca gtttatatat atatatttat attttaaagt 360  
gcacagcaga agggaaatgca atctagaaga gcaagccctt aagcagtagc ttatgataaa 420  
cttttaggaat gtatcatttc taccactaat atcacaggcg aaatgtatta tgccaccttc 480  
tagtaatggc tgaggcaata caatgcaaag gcatcacaat tagttcactt caacaactag 540  
acagaccaac atgtaactaa ttgttttctt tt 572

<210> 34  
<211> 551  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA800576

<400> 34  
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gctcacatcc atgccggtta acttaaagct agagggtataa agtgacatct acagtgtatt 120  
tgcaaggcca gagctacagt ggcaagctgc atgtggctgc gcgcaaagc tcagtgggtgc 180  
tcagcgaggc tcccgggcgc tcgctgctct aagcatgcac ttggaaacct agctcatcag 240  
tcccttttaa acagagacgg gatgatgtag accaccacc aagactcgcg gaaggggcta 300  
cttaccacaa cctgcattaa tttataaagt gagatcctaa gtcaaacatt cacagaaagg 360  
catattcact aggagctggc caggcagact gtctttctta gtgacctgtc tgctggctgt 420  
tattatagtt agcattttaa aaaagggggg gactgaattt taaaatagag cacttggcgg 480  
ggagagttaa tgtgtgcatg tgcggaagcc gctccctgca ctctgctgta ttcaacagtc 540

aacactgcac a

551

<210> 35

<211> 610

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA800739

<400> 35

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agatttatct gtgttcgaag ttccaggata gatagcaaga ggcactgtgc tcaaaagtat 120
ttgtagtatg aaagggccat cataaataca aaactgttat ctccggttcc tactcacagt 180
tgacttaaca attctccgtc ccgatgaaag gaaaacagtg tatgaagaat cccaagtag 240
attccaaccg aagccacctg gtatttttgg agctgggtgct caatgcctca gcttatgcag 300
cacactcagg gtatggcaga ggcagttaag aaaatgagtc aaatttagca tctcagtact 360
acagtgcgct ttgcagacct tcggactatt tttcctagcc aaagtacagg ggaattcaga 420
caagagccac cgctgcagac cactatccca ttagtgcaaa ctctggttca gatactgaag 480
aaacatgttg gcccaattgag gcaggttctc attgttggga tgcattttag tgtaggaaat 540
aaactggcga cggaggcgac tcaattctgc caaggtcaag ggacgggtaa atcggaggtg 600
ctccgtggtg                                     610
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<210> 36

<211> 359

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA800797

<400> 36

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acagccagtc tttcagacat ggatggaagg ttggcggttca ttgttggtga ggttggttga 120
aggctgtgcc ttcagcttct ggttaaactg cagtgaagta gccaggggtt agttgctgag 180
aatcatgttg caagcagaac catcgacat gctgaaactg gccacgagg ttgtgtggag 240
gctcctcctt aatacgaatc gtggaaatga gcccggtggc ttcggaaga acgctgccag 300
taacgaaggg tccaggaagg ctccggtctc aggagctctg ccatgctgac cctcgtgcc 359
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<210> 37

<211> 495

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA800962

<400> 37

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tagctggggc agggatagag tatcaaaaag ggatgagttg agctgctgtg gctgtgggga 120
ttggctggaa gctgctggca ggttgagaca gctggagccc tggcagggtta aaactgaggt 180
atggcagcgt taataatact cttggagcgt taatactctg gaggggacag gcacttgggg 240
ccctaagggtg cgaaggcact tggagtcagg gagaggacac ggcttgcaat gggactgggc 300
aggaccaggc ccgggggtttg gcaggcactt tggggagtgc tgggggttggc agcttggggc 360
ctgagcagcc cagaaggctt tggtagtggc aggcacagtc tctgggctgg gtctgcatta 420
aatacagggg tttcctcagt gctcgtctcg aagctctgaa ggcaagaact tgtactgctg 480
ctgccggatc tgggc                                     495
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<210> 38  
 <211> 560  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA801076

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 aactaacaac tgtcctacta ggtgagagag aaagattatg tgagaaaatc agaataccat 180  
 gtgatttgta gatttgggac gttcagaaac attgggaact aaatttagaa tgggccaag 240  
 cctggaagat ggggtctcaca ccagaagaca ttccaggagc tagccatttt aggagatgtc 300  
 cctccaaagt gtcgcatga tggccttgca cttgggaatc aggttctgct cacttgga 360  
 tccctgcgtc atggactctt gctgcccccg ttccatgtgc tcgcaattcc agctactgga 420  
 agccaccagg aatgctttct aattatcatt tgcaactaga actgtaatca gaaagaaaat 480  
 ttgtattttt gtataactcg attgtgtgcc attttatata acaggctctg ttttacaaat 540  
 aaattttgtt ttactaactt 560

<210> 39  
 <211> 437  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA801255

<400> 39  
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 tagtggaata tgttcttttg tctcaaaact ggatattgct acctgaagta ataaacaccc 180  
 caagccagaa acttggtcag tgctggcaac attttttgag tgtttgtgat ccaggaatcc 240  
 tagagtgacc gcctgccatt aagatttttc caaggacaga gtcaccccaa actctgtttt 300  
 aattaccaga taaccagatt ctttatcaga attatggaat aaaatatgta ctgtaacaaa 360  
 taatttttag aagaaaactg tttaagataa tgctcttaac attttttttt gcaaacattg 420  
 aagattacat tgaagaa 437

<210> 40  
 <211> 485  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA801346

<400> 40  
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 gagcagtgga ggcattggct ccccttccgt gcaccagcag cctaccctcc tcagataccc 120  
 ctgggttttg cctgtagcta ccacagccag ttcttgact gtacgtgtct gccagacgga 180  
 aggagaagag aaagtgttac gatgccttcc tgacctcacc cggccctcct cgcgggacgc 240  
 aggcactcca ggtggactcg agggccatcg ctggctccac ctctaaggct aaactggacg 300  
 tcagacgtcg gggcctgggt gccagaggga cccagaaaac tgaggtcccc gtctcagctg 360  
 ttaaacaggc tgtcctggag gccctgcctg gatctggggg tgctggagca gcatttcccc 420  
 cagggccacc cacccttttt tgtaaactct gattgtaaat ccaatacagt tgtctttttc 480  
 actca 485

<210> 41

<211> 416  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA817685

<400> 41  
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gtggaagtga ttaacactgg cttcttttct cccctctctg gggcagtctt ttcttctctt 180  
ggcttcggac agacaggtta atcttctgcc atgtagaggc gatacatcag agctaccacc 240  
agggctgaga tggctgggat caccagttg gtccaccaac tagaaagaca catgagcaaa 300  
gagatgtttg agtgaacctc agtgcagaga ccgcaccccc tctgatggaa aactaccaca 360  
gcatattttc cttacctcta gaacctcttt ggctaaaagg atggctcagt ttgga 416

<210> 42  
<211> 454  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA817688

<220>  
<221> unsure  
<222> (1) .. (454)  
<223> n = a or c or g or t

<400> 42  
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gtgggggaaa aaaaatcccg cagagtcaag aaaagtagac actttctctt ctttcttgt 120  
ccagggtaac agtggttaac agtgtaaata gataaaaatc caagttgggt ttttgagaaa 180  
cgttgtctgc agactgccaa tcttgacgtt tctagagcca aggactcaga attccttctt 240  
ctagatgacc gtaccacgt ggctctgcgc atccaagaca actcgtactt ctttctgcga 300  
gtaaccactc cgtggtcgtg ggagagcgga ctgaaatcca cttcccagcg ctggaaagtc 360  
agtggcttca ctttgataa ctccatctga agccttcttg gcatgtancg ctctggggag 420  
cactgcggag gcgctgggtt aggtgcggag cgtc 454

<210> 43  
<211> 429  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA817695

<400> 43  
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actgagttta caggaatgct tataaatctt attcaaatac agaaaatatt tcagcatcag 180  
gataaatgac tatgcatatt caggtgattt attaacttag tacaacttcc attcttccac 240  
atctgtagct ttggtgtact tgctttcgac cagagctggg caagcctgct ttggaaaaat 300  
cactgaaaaa tcttcaactg gattatgccg atctttacat tatgcattac ccagtgccaa 360  
tgaaggtagg tgattgcaat tgtcaaagt acacatcttt tcagaaggac aggaatatca 420  
tctttatga 429

<210> 44

<211> 522  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA817726

<400> 44  
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 ccttgactac atacacatat atgtatctat tcttaagaac agcaatcaag aggttaacaa 180  
 taatggaagg aagaagtaga caggtaagtc actgccaaat aacacaagtt cataatgac 240  
 ggttactcaa gtaacctggc aaatgcctgc tcagaattta catttacttt cctcattgac 300  
 tttcttgccct ttgtgtttca gtgaatttgg actagggtcca aaaactagac cttcaaaact 360  
 ccatctctca cattcagtg tgaagatggg catggaagggt gagtatactt gagaacatgc 420  
 atggtaacga atgtcaaaga gttttctcac agtgaccttt cccctgtctg cttcttccca 480  
 cacctttaga aatattttca tgcttctct ggagacatta ga 522

<210> 45  
 <211> 557  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA817761

<400> 45  
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 ttacaacaga gattctccag cttccagccc agctctgtcc cctgacctgc tgtgggttcc 180  
 ttgcacactc acgcctttca taaagaagga ggtacacaca gtagaacggg aggggtcggg 240  
 agaatgagca catgggggtat tctgtgtgca tgggggacag aaagggtctgt ctgctccact 300  
 gagggtcagc cactgcgatt ccaaacagaa aagaatgcaa gttgtcaaca agacacactg 360  
 tcctcaggag gagagatgat ctaagtcaat cgaaaaagaa cgatgggtta gtacccaca 420  
 gttccccagc tgagggtgca aagccataga taggattgta aacatgcggt tggaacagggt 480  
 tccatagaaa actcagtttc tcacggaaag cttgcacagg tgctttattg gctgtgtgtc 540  
 tctgaagagc aaggtta 557

<210> 46  
 <211> 605  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA817829

<400> 46  
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 aaccgtacaa agaacataat catggaagca cggttacagg ggaagcagaa gagtctgagt 180  
 agtgatttca ttctcactga ggagcggcac cctgaagaat cgagtccatt agtaacactc 240  
 accgcactga gagcagaggg gcggttagcga ttgtacttga ttatttttac tgagccattt 300  
 catcttctc acagtgagaa gaaatacaat ataaccttaa taagaaaacg acctcattac 360  
 aatctcggta aagggtctac gcttatggag tggagcagag ttcagggtgtg cttgcgggct 420  
 ccggcctcac cgtaccatcc cacctgatgt gctggacaga ggccgctctc tcatgcgccc 480  
 gcactaactc catgggagct gcaatagaat gaaccatttc tgtggcggtc ccagggtctca 540  
 ctgaggaaga aaagacttca tacacataaa tataacaatt gatctgtcta taaattatag 600  
 tggta 605

<210> 47  
 <211> 612  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA817841

<220>  
 <221> unsure  
 <222> (1)..(612)  
 <223> n = a or c or g or t

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 agcacatgac caaaacttcc tggatcacga accaacagga gatgtgaata gcctgtagat 180  
 atcaattcca acagctttac aaaatgtcat tcatctaagg catttctgtg gttctcacgg 240  
 ccacatgttc acatacataa aggcctctat tcatggacag agagatacgt tctttaggag 300  
 cagtgggtgc aggaggcgaa agcagttaca cgcttagtta ctgagtaatt ttaaagagga 360  
 aatttggcgt tccaagaaac agttttgtac atccaaaaaa aaaaatcaat gataattttc 420  
 cacttggatt attttgtgat gcagactaca agaaaatcca tgctggatta tttgctttcc 480  
 aaaggccact ttcaaagtac agatttcgag tccagaacaa ataccacag cgagaacaaa 540  
 cagaacggct aagactctaa catttgcctc catgtggcctt tcctcctcnc tcgattctct 600  
 gacattttct ga 612

<210> 48  
 <211> 622  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA817849

<400> 48  
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 tctgcttaaa aaagtagaga cacaatgatt tacatcttaa aatagtttcc ttgctccagt 120  
 tctacttaaa gatagcacag gagcagatcc gctctgcttg tcttgctggg ttatagggtg 180  
 caactcatcc tcctgggttc tggctgctgg gtacagggct gagagtgggg ttaggtttgg 240  
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<220>  
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<211> 386

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA817925

<400> 50

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<210> 51

<211> 565

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA818039

<400> 51

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<211> 525

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA818089

<400> 52

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tggacacgat gagttattta ttagcacagg ttgtcacaag tcgccagctg ttctcattct 180
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 tctgccctta tctgtctcat ggagtctcgg tccctcagag ttgcagtgtg gggggtcttg 360  
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<211> 482

<212> DNA

<213> Rattus norvegicus

<220>

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 acaagatgga tcacgacaac taaggagtg acttcttttg tgcccgaggc ctttttacag 180  
 ctgacccatg gctccaagta atacggactg aggaagttca gcaagtggca gcatcaatga 240  
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<211> 535

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818107

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 cagatactgg gctggagttg agctgagtg tgttggttaa tgaagggtgaa tatgagatat 240  
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 aaggagctgg gaatgacggg aggccttgta caccagacct ataatcccag atacctggaa 420  
 gctgagacaa gagagtcgca agttcaaggc cagcttgagc acgtgtcgag actctctctc 480  
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<210> 55

<211> 567

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818123

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 ggactccagt cagaccagaa ggctgccaat caaacttggt attggcagag acagcagcct 180  
 ctttgatctt cagaggtttg taaaagcttt ccaccctaatt ttctgagtat cataaaaagt 240

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aaaaagcact tttattctgt ccttttcccc ttttaattttt ctttttttaa ccagcaaaaag 300
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aaggaagccc tcagagatgt gtcagtgggtg ctgaggtcca ccgaggccca caccaacagg 420
tgtggcattc catgctatca cttctacaaa gaaccatgaa gaatgcttgt agaccctatg 480
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 <212> DNA  
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<220>  
 <223> Genbank Accession No. AA818139

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tactgactgc tataagcaag tggtagggat gaaggctggg ttctgtgcta tcctttaccc 240
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ccagtgtatt ttaaaggagc cgggtggttag tggtagggat ctttaattcc agtacttggg 360
aggaagaggc aagcggatct ctgagagttc aaggccagac tgggtctacag agtgagttcc 420
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518

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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818158

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catgaagtag agaataagca ctaaacacta aaaaaaaaaat aaaataaaat aaaactttta 180
ccttacttat taaactagga agaattttcc tgaaacgcac ctgttaaatt agtctataat 240
atattaatga atggaggaca tgtatttcct agtaaatatt ttaaaccatga agtatacgtc 300
tggggggaaaa aaaactttctc aggatatgaa atttttcaag tctcaatccc ctgaacagac 360
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363

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<210> 58  
 <211> 357  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
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attttgtgta tgtaagtttc tatactcact tacttttctc cataagagaa gccatacata 300
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atctaccag	ctggggctct	cggtagtcct	aatgtggtgc	tgaagttcca	gaggattcct	180	
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caccaacaag	acacgaaagc	aaacaggcag	caaacaaaaa	caacaacaga	agactagtgt	360	
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ctagtttagc	tttttaaaaa	aggatatatt	taagataccc	cttaatatga	aagttaaatt	420
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 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
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 aataaaatct ggtccaggac aagaggaggg ccactccact ccactggctc tcattggatg 360  
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<210> 63  
 <211> 548  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AA818287

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 ttgaccacc cagagcccat cttacacggc ctgggagtga cttcttggca gattctgttg 480  
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 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
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 tcctctgctc tccactgtgt ttctctgggc catggagaag tgaggacggt actgggggtct 480  
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 <211> 551  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818421

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<212> DNA  
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<220>  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA818490

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<212> DNA  
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<220>  
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<211> 557  
<212> DNA  
<213> Rattus norvegicus

<220>  
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 attaaggatg taaccagttt ctaacatgag cctattttct acactgctta tgcacatatg 180  
 cccattaaca aatggaatgt tgtcggttac atttattggt ttgtgagtggt tttctggaaa 240  
 aactgcagtt atttgtgaag accaaagtgc catgctagca ttgcatgcat ccaaataatta 300  
 atgcacagag gcacagtaga gcaacaagag agcatattga aatactagca caccctattc 360  
 ccctttttat tgcttggtta gcttaaaactt taaaaaccaa gtaaaaatct gaattcagcg 420  
 gtcaactgcc aaagaaaagta acagcagggc acatacttag gacttgaatg aaattgttaa 480  
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 aaagctcctc aaacagg 557

<210> 72  
 <211> 492  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818593

<400> 72  
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 cagtgtttta gtgaaaggct taaattttt ttaattgaac tactagttca attaaaaact 180  
 caaaaaactc attgtgttaa agtaactata tacatagata aagtgggcat ccaagaggta 240  
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 ccagcagttc ccttcgaagc tggcctgttc ctctgcacc ttcagggtc atgattcctt 360  
 gcgtagctct gtctgttggt ggtttcgtgt agagtcgtat gtgagtcctc ttttctttct 420  
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 acagctcctt ga 492

<210> 73  
 <211> 515  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818604

<220>  
 <221> unsure  
 <222> (1) .. (515)  
 <223> n = a or c or g or t

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 tcaccgggtg gccaggtac gctcggcga tctccttcat cttggtcagc accatggagc 180  
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 tgggggtcgt gcggttgccc tggctcgttg cgatgatctc caccttgccg tgctggaaca 480  
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 <211> 470  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818615

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 ggaggaccac cagtgtggga ccagtatggg ataggatata taaggaaacc ttggttcttg 300  
 ttgtttttta agggaaagaa aaaggttaag ttgaaaccga attgtgcaga accgatcaca 360  
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<210> 75  
 <211> 530  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818627

<400> 75  
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 cacacacaca cacacacaca cacacacaca cccaatcaa ggaaaaactg tgcctctgaa 180  
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 tccacacaac agctgagact tctgccctct tcattcttga tgagattttt cagcaataac 300  
 tttacattca tacattgcta gctgacgacc aatgtttccc atcgttatgc ctccagcaaa 360  
 aaatatacat ggcaaccaag agcggacata gagaaaatct ggagatgtgt attgataaac 420  
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<210> 76  
 <211> 584  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818700

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 aacatagtaa aatttttaata cagtattctg gatacaagta gaatagcact aagtaaagga 180  
 ctgtagttac ctccagcagc tgggagtagt gggtgagatc aaccaagggt tagaatagcc 240  
 ccttcacatt tcatcagtg tgaccaaac caaagcaagc taggatggag actacaacta 300  
 accttccatg ttaaccagtt attttaaggt gacttaccct cacttaatgg cagttgaggt 360  
 aagttaaaca gagagccctt acaaagacta agaaccaaat gaaaacttgt ttctagcctt 420  
 tgtttttaggt caccttaaac taaaatgctt ttacgtactt cttaacattc atgtacacat 480  
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<210> 77  
 <211> 557  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818702

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 cccacctcta ccttgaagc tgccgccatg atctcatgct ctgggctgct aggataaggg 180  
 ctacacgtca tcctcagaca caaggcagta gaagtctgtt cgcgcactgt agtttcgaga 240  
 gccaaagtca gagacatcca tttcactggc atggccctct cctatggaga ccttgctttc 300  
 gtgtagtga gttggtggct ccccaaagac aggtccactg acaccagggt ctccctcagg 360  
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 catgggatct ttgtcatcct gaagtcgggt ttgggggtct ccctccacgg gtctgtattg 480  
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 gccaggcttc caaagca 557

<210> 78  
 <211> 537  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818721

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 tgtagtcctt ggatgttact ttctgtgggt ggcaccactg ccttcaagga agggaggcct 180  
 ggaagaggct cgcagtctcg gtacccctca gagcggggag cctacttccg ctttctgtac 240  
 ctgctcactc ttgtgggtac catcacagta agggggccgc cgagtggcct tgcaggatca 300  
 gagggccact gtgcgtgtct cttcggcctt gaacttgagt ggggaaaggc cagtgcgctg 360  
 gaagaagtgg gagccatcgc agaagggtcg attcttactt cggccacata cacaccacct 420  
 gtaggttttc ccggcaacca gctccaacct gatgggtgtt ttctgtgcca ccactggcct 480  
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<210> 79  
 <211> 596  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818741

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 aagaggctta cagtgtgttt cattaaacaa agcaaagctg cgacaaaaca ggatcacatc 180  
 aatagtagta tgcacagaa gagtgtagta atccatcaaa cacaattggg catctgtgcc 240  
 tttcctcaaa aagaacaaga gctctacact gaagaatatg tagtgcacaa gaagcattgt 300  
 ttgtaggctg tgaaggaaca taaactggca taatgtcact tattaattca agtctcgatg 360  
 acctatgacc tctctgtgaa tacaaagggg tccaatgtct taggcacctg ctcatgggac 420  
 tgtatgttta tttccagggt gcacagctcc atacaaagac actaaagatg ggtttggaaac 480  
 atggcagcat ttacatattt gaaaaagttc aggcacattc ggatacaaaa gaaagggggg 540  
 gaaatgcaaa tagaaatttc tcttaagtct ctgaaacaca gtgcaaaatt gagaca 596

<210> 80  
 <211> 544  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818747

<400> 80  
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 ctgtcatata ttaaaaacga gaataagaaa gcacacactg cgtataggaa gctgccttct 180  
 cctggaccat tttcacatta tctgggagac agaactgaaa caaaatacag tattcaccac 240  
 atgcaacact gaaaccatcg ctgcgtagac actgcaagct ctgcggagga atgacttctg 300  
 tgaggaagcc cctggtgacg ccgccgagat aatcacccat gagaagataa acagaactcg 360  
 atggagaggc cttaaaggcct catgccaaagt cccacagagg aatgcagcct tttgctctcc 420  
 aaaccctccc tcaaagccga ccaagcaatg aatcagaggg gtctgccacc tcggctgcac 480  
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 gttt 544

<210> 81  
 <211> 488  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818770

<400> 81  
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 tcggttccca gcctcccagg cttgtcatcc tctgaaggct gagtgggggtg tctgccctgc 180  
 accacagctc ttctccaaag ccgaggaaaa cccatgggga atacagggtg agaggacctg 240  
 aggatcatgg gatgggagcc cacattgaac ctgggtgagg tagtctgtcg cctgaggccc 300  
 acacgggtcc tgctgaggtg aaatttgtaa gtttatttca gggacgtggg tcaggactcc 360  
 tcggtgccag agtcctctc ttcctcccca aagcagctgt cggcctcctc cacttcaccg 420  
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 tcgtgccg 488

<210> 82  
 <211> 561  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818774

<400> 82  
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 tacatgcatt aaaaagtctt tcagctgctg cagaggaaac gtcagaagcg aggcctgagg 180  
 ccggagctcc gagtctgcac gggacacagg cgtacacagg tagctcacag tatgcacagg 240  
 ttaatatgag acacagtgac accggtggct tggcttggct ggcagctgcc agtacgatga 300  
 caatgtggct cttctgaaat ggaggcagcc ctgtcctgag ccatcagccg ggccttgctt 360  
 ggctgtacaa ggcttcgggtg tgtagtgtgc tctgggttgg tcggagggtg gaagcaccaa 420  
 agacccttaa cctgggtccc cggcaggcgg gacaggggtc attatttttc tctggccag 480  
 aatggctgt tcttcagaat agataaagtt ccttagcctt agttatcatg cctttccctt 540

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561

<210> 83

<211> 606

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA818781

<400> 83

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aagcagtgat acaccaaata caggcattat aaggattttt tttttaagta agtatctgtt 180
tagaatacaa tgttacaaaa gcaagaattg gattttaata aaacaattta ataaaacaag 240
gcacaatgtt taaggcaaaa tttatgaaga aagtatataa agttaatata agatcatatt 300
ttttaatatc ctttggggaa agaggcacia gaattagaaa tagcttaaac attttttttag 360
aatattagcc ataagaaagt aaaataaatt tgatacaata ggactctatt tttccagaa 420
aacaaactcc actgttgaat catatttctg agttccattt taatcatata tatatttata 480
cagatatttc taatacacag actttaagta cagaaaatta agatgtcaga gcatatgtaa 540
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ccgact 606
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<210> 84

<211> 563

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA818796

<400> 84

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tgtacttgac tttagtgggtg agattcttag ctgtggcatg gatacacatg atcagaacag 180
tattaaataa ggagaacgtc attgaaaaga gcaatctgtg tgcacaaag aacattatca 240
agaaagcaaa gaagcaatgt gtataaaacg tccctaatag gtaaactctac atagataaaag 300
agaagattgg tggtagaca accagaggga ggaagaatgg agagtcactg agtaattggtt 360
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gattctttac acaagaataa tggtagagg aatgagccac aatagcagat attatccaac 480
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ttctgcataa ctttgagtga tgt 563
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<210> 85

<211> 407

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA818801

<400> 85

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gctgttcctg cagctccagt gtgacatttg cttaaagatg aagccagccc cattctaaat 360
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407

<210> 86

<211> 582

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818907

<220>

<221> unsure

<222> (1)..(582)

<223> n = a or c or g or t

<400> 86

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tttccaacaa ataatgcaga ccaaatacaca agatggccac ctactgggtc acatgggtcct 240
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catgcgacca ttaggggtccg tgcttctact gccgaaatgg agaatcccgg ttccttagca 480
gcaggtccg tatcccgcg ccactgagga accatccggg gatgcagacc gagtacggtg 540
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<210> 87

<211> 612

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818910

<400> 87

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gcctacaagg acatattcag caccaaataa aagattacaa cagccataga atataatcta 180
taaagcaaac atttaatat gcactttgtt tcgcaaacat tttggatttt acttttctta 240
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ccaattatca gaatattggt cattcttgct taataaagta tttttagtaa catggtagtg 480
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atcccatcag ct 612
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<210> 88

<211> 412

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818921

<400> 88

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<210> 89

<211> 598

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818947

<400> 89

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 aaacagttgc atgggtgcct gaactctagt tggcaataat tatccacatg ccagaaagtt 480  
 cctcacacaa gcaacagagt gcccacaaaag ttggggctctg agaaaacatg gcctgtccag 540  
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<210> 90

<211> 491

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818951

<400> 90

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 tagggccatg aaaaatagct gggctctatt gcatgtttca gaggcattaa tttttcctgg 420  
 tgtcccagcc caccagcgcc acactatggc ccagagttag cactacaagc gttgctggcc 480  
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<210> 91

<211> 498

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818996

<400> 91

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 tgggtcttct ttgagtgtga ctgttcgggt gaagacaacc tgtccttgat ggctatccgg 180

atccacagag aagtacccaa ggcgctcaaa ctggaacttg tcaaagggct ttgccaaagc 240  
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cctgacaaca tgctgcag 498

<210> 92  
<211> 188  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA819021

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gggtggcacgt gtcaagttcc acagagtcct gccttgccgg gtgtctgaat gtacagctcg 180  
gggtcact 188

<210> 93  
<211> 318  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA819041

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actgtaaatc tttctaaatc totgcaatgg ctctaaatga gggtaagtga ataagtggaa 180  
gtgaaggaga atggaggggca ggaggtggag ccactccagg taccaacca cccagactcc 240  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA819055

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agttgggttg ggctgttggt tgattttctt ctttgaatcc ttatatgaca actgctggta 240  
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 <213> Rattus norvegicus

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 gttgaataca agagttaaac taatccacac cagctcaaaa accctgtgga gacttagttg 180  
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<210> 96  
 <211> 555  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 aactcaaaaag acaccagaga cagctttttt tttttttttt ttttttttgt tttttttttt 180  
 tgtttgtttg ttttgctttg tttttaatag gcatgcaaag attaaagtag tgaaataaaa 240  
 aataaatgac cctagattgg gcaaagaaaa ccatctttat gaagaagaaa tttaaatgct 300  
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 aggtaaacat tatgtattca ccttctgaaa tctacagtga tcttaacttg tgctttcaat 480  
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<210> 97  
 <211> 444  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA819172

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 cgatgaaact gctactgaat ttagagaggt gatgtccgcc tataagagca tttaaagagt 180  
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<210> 98  
 <211> 351  
 <212> DNA  
 <213> Rattus norvegicus

<220>



<223> Genbank Accession No. AA819199

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cgaaattggg ggttcaaggc caggctcttg ggcccttttt cggccatcta aaaaaaacat 180  
ccacctaatg ttaactgggc ttgaaccggg acaaaaactt cacttcccaa cttaaaggcca 240  
cccaagggaa aaccttgtac caagagccca ggtaaaatga cttggctgaa agccaccct 300  
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<210> 99

<211> 621

<212> DNA

<213> Rattus norvegicus

<220>

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<400> 99

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gtatgtagaa catactggat tataaatcaa caacacaggt cccacttggt aaaacgtaga 180  
aataaaaaaa agaaaagaaa aaattaagtt aaagtattag cacatatata gtgtcagaag 240  
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<210> 100

<211> 336

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA819333

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aaacacatct ggacctgaag caggcaccgt aggtcgtacg caccacagga aaaggctgtg 180  
ctcaataggg ctgcaaaatg attttggctc tggggactga aggaggacac actgatacag 240  
aatcaggggt atgtgactct gagcgaccgt ctgtcacctg gaccaagcat gtcaaatggc 300  
gtttagggga gtttggtcgg tgagtcaaaa gacttc 336

<210> 101

<211> 402

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA819383

<400> 101

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gtatgttggtg gcaaatttcc agaaaacaca ctgaaaatct ttacagttca gaactgcttc 180  
actttatata taattacaaa ttactatata gcgcttgggt tgaacccgac tttttactta 240  
ataggcttag tacagaaatg ttcatagcgc atttgagagc aacaagaaca gaggtatagg 300  
tgtatcctgc ccaccttctg tacagcctag gcctcagggg caaacctgag acgaacccgc 360  
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<210> 102

<211> 529

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA819530

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acgtggaatg gcctggtgag acgaacagtt tcaatacctg gttacagagg cacaaagtca 180  
tctgatgac accggtcact gataaatccc cagggacact gggatcggag aagaccgggg 240  
tgccctgggt ccagcgtgct ggagatttcc ttcaaagtcc tgattttggc aaaagaactt 300  
ggcaagctag caagcgaact gtccggccgt agagcgtgac gagggagggg ccttccacgc 360  
ttgggtgggt gaggtaggcgc ccaacgcagg gaacaatgct ctctctcat ctgtctgcac 420  
gcctacccct cccactacac ttctaggctg cagagagcta gcccggggtc tgtagaggca 480  
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<210> 103

<211> 485

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA819672

<220>

<221> unsure

<222> (1) .. (485)

<223> n = a or c or g or t

<400> 103

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aagcacaat caaaccaaca gaaagatagt tttttttaa aaattatctc cttaggcctc 180  
tgtctttaac ttccccttgt tcctatttct atgagagaga ccgtaacgca caggctgagg 240  
agacacactg ccaacaaggc taatgtgcac cagaccgaag agggacagct cggctttggc 300  
cagccctctt cctgcaggat accaatccta tgtttgctgc aatcctgacc tgctcagatg 360  
aagcggcact caggcactag tcagccgttg accatacaag aacagagaac actggagtag 420  
acagagcttt ctccaggaat gctgacaggc gtcnctccct tttgagaagt cttttgcttt 480  
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<210> 104

<211> 597

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA819709

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# SEQUENCE LISTING

<110> Mendrick, Donna  
Porter, Mark  
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Elashoff, Michael  
Gene Logic, Inc.

<120> Molecular Toxicology Modeling

<130> 44921-5038-US

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<150> US 60/222,040

<151> 2000-07-31

<150> US 60/222,880

<151> 2000-11-02

<150> US 60/290,029

<151> 2001-05-11

<150> US 60/290,645

<151> 2001-05-15

<150> US 60/292,336

<151> 2001-05-22

<150> US 60/295,798

<151> 2001-06-06

<150> US 60/297,457

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158

<210> 2

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<212> DNA

<213> Rattus norvegicus

<220>

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gtcatcttga ctgcacatcg actcacatag gaggcacctc tgggagtatg tgggagggta 180  
ctgccagaga ggcttaacag gatggcagac atttctgaat atgggcagca gcaaaccatc 240  
agctgtggtc ctgagctgtg ccttgtgctg gagggcaggt ctgtaggtag catgatggtc 300  
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<210> 3

<211> 371

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA685974

<220>

<221> unsure

<222> (1)..(371)

<223> n = a or c or g or t

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ctggtttcat cgggttggtc ggagagcgca accactcctt cttcagcagc tgcttcagct 300  
gttagagccg catgttgggg ttttctgct tcaaccgtgg cagcttcanc tcctcaaatg 360  
cgggtgaaggc c 371

<210> 4

<211> 290

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA686132

<220>

<221> unsure

<222> (1)..(290)

<223> n = a or c or g or t

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aggctcataa agtntgtttc aaggagataa aaagactcaa aaaantgcct cattcaatgc 120  
ctgattatgc tctgactaga aattatttgg aacttatggg ggagcttcct tggaacaaaa 180  
gtacaactga ccgctgggac atccggggcag cccgcacatc tctggacaat gaccactatg 240

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<210> 5

<211> 342

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA686461

<400> 5

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cagagtatgc aactgggcta tcattgaccc aggtgattcc gatattatta gaagcatgcc 180
agaacagact ggtgagaagt aaacaagaaa gtctcccttt aataaaactt tgccagagct 240
ccttttaaaa aatatggtgt ctgggcttct tcttgtttgg ctttcttgaa accactggca 300
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<210> 6

<211> 496

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA799294

<400> 6

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cgtagagaga cccagcaagg caccacaccc tctcatggca gagagggagc agtggggcag 120
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<210> 7

<211> 328

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA799323

<400> 7

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tatccgtgag gtctccaaag tccccctggc aagttacaca ggcacaagat tgttttcttt 180
gagtgcgggg atgcggtgaa caaacatata aagtgagaat tcttgcttca gtgaatatta 240
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ctgaaagttc aaagtctggt catgaatt 328
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<210> 8

<211> 591

<212> DNA

<213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA799461

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 cgtctgataa attaactctg ctgtaaccta tggatgaaat gcaaggaggc agtgcccggg 180  
 cttcagcgtg atttgaggtc tacaggtctt ccagggggcc acagtttgtg aattccgact 240  
 ttgctgagcg ggaggcttgg caggatcagg cagcaggtgc tgggacaaca ctggctctcc 300  
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 ccgcctctca gtgcctgtca aggacaaaag ttcattggtta tgaactgtcc agcacagccc 540  
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<210> 9  
 <211> 683  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA799498

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 gatcacttga gaggtggtcc cagagctggg gaaagaagag ccgcaggcag agtcagaagc 180  
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 <211> 731  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA799511

<220>  
 <221> unsure  
 <222> (1)..(731)  
 <223> n = a or c or g or t

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 aaacattccc ttttacctta aaagtgtctt ttaaatgaag gcaccaacaa gaactacttt 240  
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ggcaccagaa tatacttgtc catgggttcat atcaatgcc a tggaagtgg gaaaaactca 480
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<210> 11
<211> 483
<212> DNA
<213> Rattus norvegicus

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<220>
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<223> n = a or c or g or t

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tcacaaatgc tctcgcatcg ctctgtgtct ccgcatacaa tgctattagc atactganat 360
aaagttctaa aatgtaattc gaaactgagc cgtcgggtact cgggctcaca ctcccaataa 420
caattacccc aggaattaga aaatcaatac ggtcttcaaa tacccaattc caatcccaaa 480
cac 483

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<210> 12
<211> 570
<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. AA799531

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<220>
<221> unsure
<222> (1)..(570)
<223> n = a or c or g or t

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agatgccttc tcattagttt cttctagttt tgcaattcta gatccaaatt gtatggcccg 180
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tgccaactgc tcactcgna caatcccagt gagaatcacc tttgcaactgc tcttgntaga 540
ctgcacagca tcctcgggttc acaacaaaaa 570

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<210> 13
<211> 633

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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA799545

<220>  
<221> unsure  
<222> (1)..(633)  
<223> n = a or c or g or t

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<220>  
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 <213> Rattus norvegicus

<220>  
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<211> 588

<212> DNA

<213> Rattus norvegicus

<220>

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<211> 616

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA799744

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<210> 23

<211> 567

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA799766

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<210> 24

<211> 556

<212> DNA

<213> Rattus norvegicus

<220>

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<210> 25

<211> 582

<212> DNA

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<220>

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<210> 26

<211> 500

<212> DNA

<213> Rattus norvegicus

<220>

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<213> Rattus norvegicus

<220>  
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<213> Rattus norvegicus

<220>  
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<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA800243

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<212> DNA

<213> Rattus norvegicus

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<212> DNA

<213> Rattus norvegicus

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<220>  
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<212> DNA  
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<220>  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA800576

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<210> 35

<211> 610

<212> DNA

<213> Rattus norvegicus

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<223> Genbank Accession No. AA800739

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cacactcagg gtatggcaga ggcagttaag aaaatgagtc aaatttagca tctcagtact 360
acagtgcgct ttgcagacct tcggactatt ttctctagcc aaagtacagg ggaattcaga 420
caagagccac cgctgcagac cactatccca ttagtgcaca ctctgggttca gatactgaag 480
aaacatgttg gccaatgtag gcagggtctc attgttggga tgcatttttag tgtaggaaat 540
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ctccgtggtg 610
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<210> 36

<211> 359

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA800797

<400> 36

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aatcatgttg caagcagaac catcgacat gctgaaactg gccacgagg ttgtgtggag 240
gctcctcctt aatacgaatc gtggaaatga gcccggtggc ttccggaaga acgctgccag 300
taacgaaggc tccaggaagg ctccggtctc aggagctctg ccatgctgac cctcgtgcc 359
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<210> 37

<211> 495

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA800962

<400> 37

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ttggctggaa gctgctggca ggttgaggca gctggagccc tggcagggtg aaactgaggt 180
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ctgagcagcc cagaaggctt tggtagtggc aggcacagtc tctgggctgg gtctgcatta 420
aatacagggg ttctctcagt gctcgtctcg aagctctgaa ggcaagaact tgtactgctg 480
ctgccggatc tgggc 495
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<210> 38  
 <211> 560  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA801076

<400> 38  
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 aactaacaac tgtcctacta ggtgagagag aaagattatg tgagaaaatc agaataccat 180  
 gtgatttgta gatttgaggac gttcagaaac attgggaact aaatttagaa tgggccaaag 240  
 cctggaagat ggggtctaca ccagaagaca ttccaggagc tagccatttt aggagatgtc 300  
 cctccaaaagt gtcgcgatga tggccttgca cttgggaatc aggttctgct cacttgga 360  
 tccctgcgtc atggactctt gctgcccccg ttccatgtgc tcgcaattcc agctactgga 420  
 agccaccagg aatgctttct aattatcatt tgcaactaga actgtaatca gaaagaaaat 480  
 ttgtattttt gtataactcg attgtgtgcc attttatata acaggctcctg ttttacaat 540  
 aaattttgtt ttactaactt 560

<210> 39  
 <211> 437  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA801255

<400> 39  
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 tagtgaaaaa tgttcttttg tctcaaactt ggatattgct acctgaagta ataaacacc 180  
 caagccagaa acttggtcag tgctggcaac attttttgag tgtttgtgat ccaggaatcc 240  
 tagagtgacc gcctgccatt aagatttttc caaggacaga gtcaccccaa actcttggtt 300  
 aattaccaga taaccagatt ctttatcaga attatggaat aaaatatgta ctgtaacaaa 360  
 taatttttag aagaaaactg ttttaagataa tgctcttaac attttttttt gcaaacattg 420  
 aagattacat tgaagaa 437

<210> 40  
 <211> 485  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA801346

<400> 40  
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 gagcagtgga ggcattggcct ccccttccgt gcaccagcag cctaccctcc tcagataccc 120  
 ctgggttttg cctgtagcta ccacagccag ttccctggact gtacgtgtct gccagacgga 180  
 aggagaagag aaagtggtag gatgccttcc tgacctcacc cggccctcct cgcgggacgc 240  
 aggcactcca ggtggactcg agggccatcg ctggctccac ctctaaggte aaactggacg 300  
 tcagacgtcg gggcctgggt gccagagga cccagaaaac tgagggtccc gtctcagctg 360  
 ttaaacaggc tgcctggag gccctgcctg gatctggggg tgctggagca gcatttcccc 420  
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 actca 485

<210> 41

<211> 416  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA817685

<400> 41  
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gtggaagtga ttaacactgg cttcttttct cccctctctg gggcagtctt ttcttctctt 180  
ggcttcggac agacaggtta atcttctgcc atgtagaggc gatacatcag agctaccacc 240  
agggctgaga tggctgggat caccagttg gtccaccaac tagaaagaca catgagcaaa 300  
gagatgtttg agtgaacctc agtgcagaga ccgcaccccc tctgatggaa aactaccaca 360  
gcatattttc cttacctcta gaacctctt ggctaaaagg atggctcagt tttgga 416

<210> 42  
<211> 454  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA817688

<220>  
<221> unsure  
<222> (1)..(454)  
<223> n = a or c or g or t

<400> 42  
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ccagggtaac agtggttaac agtgtaaata gataaaaatc caagttgggt ttttgagaa 180  
cgttgtctgc agactgcaa tcttgacgtt tctagagcca aggactcaga attccttctt 240  
ctagatgacc gtaccacgt ggctctgcgc atccaagaca actcgtactt ctttctgcga 300  
gtaaccactc cgtggtcgtg ggagagcgga ctgaaatcca cttcccagcg ctggaaagtc 360  
agtggcttca ctttgataa ctccatctga agccttcttg gcatgtancg ctctggggag 420  
cactgcgag gcgctgggtt aggtgcgag cgtc 454

<210> 43  
<211> 429  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA817695

<400> 43  
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actgagttta caggaatgct tataaatttc attcaaatac agaaaatatt tcagcatcag 180  
gataaatgac tatgcatatt caggtgattt attaattctag tacaacttcc attcttccac 240  
atctgtagct ttggtgtact tgctttcgac cagagctggg caagcctgct ttggaaaaat 300  
cactgaaaaa tcttcaactg gattatgccg atctttacat tatgcattac ccagtgccaa 360  
tgaaggtagg tgattgcaat tgtcaaatgt acacatcttt tcagaaggac aggaatatca 420  
tctttatga 429

<210> 44

<211> 522  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA817726

<400> 44  
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 ccttgactac atacacatat atgtatctat tcttaagaac agcaatcaag aggttaacaa 180  
 taatggaagg aagaagtaga caggtaagtc actgccaaat aacacaagtt cataatgatc 240  
 ggttactcaa gtaacctggc aaatgcctgc tcagaattta catttacttt cctcattgac 300  
 tttcttgctt ttgtgtttca gtgaatttgg actaggtcca aaaactagac cttcaaaact 360  
 ccatctctca cattcagtg tgaagatggg catgaagggt gagtatactt gagaacatgc 420  
 atggtaacga atgtcaaaga gttttctcac agtgaccttt cccctgtctg cttcttccca 480  
 cacctttaga aatattttca tgcttcctct ggagacatta ga 522

<210> 45  
 <211> 557  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA817761

<400> 45  
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 ttacaacaga gattctccag cttccagccc agctctgtcc cctgacctgc tgtgggttcc 180  
 ttgcacactc acgcctttca taaagaagga ggtacacaca gtagaacggg aggggtcggg 240  
 agaatgagca catgggggtat tctgtgtgca tgggggacag aaaggtctgt ctgctccact 300  
 gagtgtcagc cactgcgatt ccaaacagaa aagaatgcaa gttgtcaaca agacacactg 360  
 tcctcaggag gagagatgat ctaagtcaat cgaaaaagaa cgatggttta gtacccca 420  
 gttccccagc tgaggtgcca aagccataga taggattgta aacatgcggt tggaacaggt 480  
 tccatagaaa actcagtttc tcacggaaag cttgcacagg tgctttattg gctgtgtgtc 540  
 tctgaagagc aaggtta 557

<210> 46  
 <211> 605  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA817829

<400> 46  
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 aaccgtacaa agaacataat catggaagca cggttacagg ggaagcagaa gagtctgagt 180  
 agtgatttca ttctcactga ggagcggcac cctgaagaat cgagtccatt agtaacactc 240  
 accgcactga gagcagaggg gcgttagcga ttgtacttga ttatttttac tgagccattt 300  
 catcttcctc acagtgagaa gaaatacaat ataaccttaa taagaaaacg acctcattac 360  
 aatctcggtg aagggtctacg gcttatggag tggagcagag ttcagggtgtg cttgcgggct 420  
 ccggcctcac cgtaccatcc cacctgatgt gctggacaga ggccgctctc tcatgcgccc 480  
 gcactaacac catgggagct gcaatagaat gaaccatttc tgtggcgctc ccagggtctca 540  
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 tggtgta 605

<210> 47  
 <211> 612  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA817841

<220>  
 <221> unsure  
 <222> (1)..(612)  
 <223> n = a or c or g or t

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 agcacatgac caaaacttcc tggatcacga accaacagga gatgtgaata gcctgtagat 180  
 atcaattcca acagctttac aaaatgtcat tcatctaagg catttctgtg gttctcacgg 240  
 ccacatgttc acatacataa aggcctctat tcatggacag agagatacgt tctttaggag 300  
 cagtgggtgc aggaggcgaa agcagttaca cgcttagtta ctgagtaatt ttaaagagga 360  
 aatttggcgt tccaagaaac agttttgtac atccaaaaaa aaaaatcaat gataattttc 420  
 cacttggatt attttgtgat gcagactaca agaaaatcca tgctggatta tttgctttcc 480  
 aaaggccact ttcaaagtac agatttcgag tccagaacaa ataccacag cgagaacaaa 540  
 cagaacggct aagactctaa catttgccct catgtggcct tcctcctcnc tcgattctct 600  
 gacattttct ga 612

<210> 48  
 <211> 622  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA817849

<400> 48  
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 tctacttaaa gatagcacag gagcagatcc gctctgcttg tcttgctggg ttataggggtg 180  
 caactcatcc tcctgggttc tggctgctgg gtacagggct gagagtgggg ttaggttttg 240  
 aaaaaacatg gctgtgggta gcacgagttg gcttttgttg tgtttctttg cataggtgtt 300  
 aggagccgag agcagctagg gtgaggatcc agaacacagg cttgacagtc cccatcctgt 360  
 ttgcctgccca ctggcctggg gcatcttgct tatctttgag gaagtcctag gaaatagttt 420  
 ctgtaatgca tcctgatttg aaatcagtga aagtgttttg gcagtgggaa aataacaatc 480  
 ccacttcaga gatctacaa acggaaaatt tgccctcgaa aaactccttt aaacgctaac 540  
 tgagacaaat gattccgtgg gcaaggagac tgtcagccag agctctgtaa aatgcattct 600  
 gctagttaac agttctttcc tt 622

<210> 49  
 <211> 493  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA817921

<400> 49  
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ccatctatac cagtgtcaaa tgagggaggg aggggaaggg agggcagagc agggagacga 120
ggggaggagg gaggagtccc ctctactggg aataaagctc caggttcatc ccgtcgtgga 180
tctcatagtc tcccagagac acgtgggtctt taaaaatcgt gtaccacttt ttaagaacga 240
tcttattcca gcgggtgcca gtttgagccg ctatcagttt cttcagggtcg ccgatgggtgt 300
catcgggtgtt gcacttaacg cggacttttct ttcctagacg gtcgttgcaa accacctcaa 360
tcattgtggc tggagccggc tttgcctccc gcaaccccta ggctccaag tcttggcagc 420
ttcccgcat ctccggcctc tccgttttagc cttctcacct ccaatgtcct cgaacctagc 480
gacctcgtg ccg 493
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<210> 50

<211> 386

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA817925

<400> 50

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ggcacggcag tcctcagaac gggcactgag acagcacctc atgcgtgtca ggtctttaat 180
ttttccctg ccagagcttt ttctttcttt gcttcgttgt tactgtgttt tttctgttta 240
acaattcaat tggcagaaaa atggctatcg ctggtggaca ttagggttgc agtgaaaaaa 300
aatcccccct cccccaattc ttgcttgcca ccgtgggaga cgaggtgagg gttcctagag 360
gtttcccaac ccacctcaga gcttcc 386
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<210> 51

<211> 565

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818039

<400> 51

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agctccgagt tattaacaa accttgctct tgtacaactg aggtctgatg gttttaagtt 180
gatgcctggg tgcagggcca gacacaacct tagggatgtt tcttacctgt acatacatat 240
atacaaatat attccacaaa tgtgtgtata catgggcatg tattaattta cgtggggaat 300
ttataaaatt atatatacat acacatacat gcatatctat atacagctcc ccacctcac 360
cagtgagctg ctgaagtagc tcgttagctc cgtgctcgat tattgctgtc tgggtataact 420
acatgattta gtgccaagc cagacacatt ctctgggtgt ggatgggtcac tgtcatatag 480
acacgtgtat ccttgatgct cgtgtatgaa gagcattgct cccatgtgtc aggcattgcc 540
taccacagta aactgccttt accac 565
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<210> 52

<211> 525

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818089

<400> 52

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tggacacgat gagttattta ttagcacagg ttgtcacaag tcgccagctg ttctcattct 180
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tccactgtct ccttcttgcc agtctcttgc ccttcaaaga gggggtacct ggccctccaca 240  
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 tctgccctta tctgtctcat ggagtctcgg tccctcagag ttgcagtgtg gggggtcttg 360  
 ttcactgtat caaagtcaat ggtgatgcc aacgccacgc caatctcatc agttcttgca 420  
 tatcgccctc caatagaccc agaggaatcg tcaactttat gagacacgcc atttcgagtc 480  
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<210> 53

<211> 482

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA818105

<400> 53

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 acaagatgga tcacgacaac taagggagtg acttcttttg tgcccgaggc ctttttacag 180  
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 agaaggcagg tccctcatac cttggtcttt caagacatag cagcaccaca cccactgcc 420  
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<210> 54

<211> 535

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA818107

<400> 54

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 ggtgttcttt gtagggtaga agccctacaa agggtttgtc agagctgggc tgggacatag 180  
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 gctgagacaa gagagtcgca agttcaaggc cagcttggac acgtgtcgag actctctctc 480  
 aaggtaaaaa taaaagagga ttgcaattta cttcagagtt tgactggcac cctgg 535

<210> 55

<211> 567

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA818123

<400> 55

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 ggactccagt cagaccagaa ggctgccaat caaacttggt attggcagag acagcagcct 180  
 ctttgatctt cagaggtttg taaaagcttt ccaccctaatt ttctgagtat cataaaaagt 240

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aaaaagcact tttattctgt ccttttcccc ttttaattttt ctttttttaa ccagcaaaag 300
gactacttat ttttatgact tcatttttat gagcacaaca gttctgtcaa ttacttagag 360
aaggaagccc tcagagatgt gtcagtgggtg ctgaggtcca ccgaggccca caccaacagg 420
tgtggcattc catgctatca cttctacaaa gaaccatgaa gaatgcttgt agaccctatg 480
tacagcatat agtccacaca tgcttgatgt gcgtccatac cacgatccag taacagcaaa 540
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<210> 56

<211> 518

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818139

<400> 56

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tactgactgc tataagcaag tggtagggat gaaggctggg ttctgtctta tcctttaccc 240
acgggcatca ctaacactga gaaacaacac caggacattg caccacatt gcaagacatt 300
ccagtgtatt ttaaaggagc cgggtggttag tggtagaggc ctttaatccc agtacttggg 360
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agaatagcca aaggctcaca gagaaacccg gtgtcaaaac cccaaaaaat ttggagaaat 480
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<210> 57

<211> 363

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818158

<400> 57

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ccttacttat taaactagga agaattttcc tgaaacgcac ctgttaaatt agtctataat 240
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taa 363

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<210> 58

<211> 357

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818163

<400> 58

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attttgtgta tgtaagtttc tatactcact tactttttctc cataagagaa gccatacata 300
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 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818211

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 gggagagtcg ctggtcttca gttaggttg gaaggctgaa gacactgggt gctcatgaca 240  
 gcaaagggca gcagcagtga cagcggcagg gacaacgtaa gtgagcagag aagatgagct 300  
 caccaacaag acacgaaagc aaacaggcag caaacaaaaa caacaacaga agactagtgt 360  
 tttcccttca gggatccttg ttttgtggcg gtgctggaag tgcttccac ctcagctaca 420  
 tccacaggtc aggcagctca aagtctctaa gtgcagacc tggatcctga cgcctctggc 480  
 ctctgtgagg acctgcactc acacacacac gtagttcctg agtccccgtg tctcaggatg 540  
 ttctccatc agagcagaaa cctacacctc tc 572

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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818258

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 cagacatcgg aatagactat ggaacttgag cctagtgaga tcagaagtca aaatctaaag 180  
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 atgaaacaaa tggatgtcac tgtgaagtaa ctgagatctg tctaggtttt ggtgtttatt 300  
 cagaacactt tctttgacta cattaggaaa taagtgtttt tgctgagcca actctaattt 360  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818264

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 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818271

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 tgactattaa ggaaaacatt aaatattaaa taacagaaat aaaatgtgta aacactaatc 180  
 taactgggga ttttgctatt gcaactgtcc aatgaagtgg tttcaacagt acgaaaaggg 240  
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 aataaaatct ggtccaggac aagaggaggg ccactccact ccactggctc tcattggatg 360  
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<210> 63  
 <211> 548  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818287

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 aaatggcagg taggaatttt ctgccttgcc cttctttact taagaacaga aaatactaga 180  
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 gaaagatcac agtgggtgctg gacagtcctg ttccatccgg acacacctgc tggaggtcag 360  
 atgctaacac aaagaggatt tatctctgac tcagatcacc cactgtgtgg gccagcatgt 420  
 ttgaccaccc cagagcccat cttacacggc ctgggagtga cttcttgga gattctgttg 480  
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 aatggaca 548

<210> 64  
 <211> 554  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818288

<400> 64  
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 gaaaaatgaa aaacacattt taaaaggtgc ttcatttttc attccattag taaagccttg 180  
 acaggctctt gaaacgtcag tcaagtccag gaagaactag aaatgcctga gacatttcca 240  
 tttcagtgat tattgcaaat aaaaattcct cattgtgtct tcaaaaaaat ccctgagagg 300  
 ccagcaagcc cattgtgcag acggagagac tgaggtcaga actccttagt ctcctcatgg 360  
 gagactggag catgtcagtg aagttattgc tttaaagttt tagcaagggt tcgcaagcat 420  
 tcctctgctc tccactgtgt ttctctgggc catggagaag tgaggacggt actggggctc 480  
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<210> 65  
 <211> 551  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818355

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 attttaagat catccgaaat taaagacaca ttgtaagcca gtccttggt ctcctggtcc 180  
 gtagcaaata gcaaactatc aaaaacaaat acagttttaa aatgtttaag gtaacaattg 240  
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 agaaaggagg gattgggaca tcatgcatgt taaatgtttt aagggaagtgt gcatctactg 360  
 ggctggggag acggccttagt cagcacaagt aggtataagg gcctgaattt ggcacagtca 420  
 aaaacgggtg gttcgatgga ctgtggttat aaccccagag ctggctcact agctatcaag 480  
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 <211> 340  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818412

<400> 66  
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 gggcaatgcc ttcgccaaga caaatgctgt ttcctgtgga gaaggcatg aaagcttaac 180  
 tctttttcag tgccccattg gcatccagga agtgttcagg attgaagctg tctgggtggt 240  
 caaagtactg tgggtcatgg agagctgaac tcaggatggg gtacacttca gtgttcttgg 300  
 gaagcaggta cctcgggaac atggtgtctt cctcgtgccg 340

<210> 67  
 <211> 564  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818421

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 ttaagactgg ttgagaaata gaacaaaaac atagtaaaat gttaaaaaa ttaaagaaca 180  
 ttttccaagt ataaatttta taaatacaaa acaaatccac aaatgacttt gaatgctaaa 240  
 taaatatcta gttaataaat tcagttggta ctggctacag cacatcagag ctagcgaaact 300  
 ggactcactc atgtgtagtgt ttgaaacct atgacatgga gctcagacac actctctatg 360  
 gtgtgttcta gcaggctcac cgtggagaca agacctcctt actactggaa ctccaaaggc 420  
 tcaatgacaa aatagagcat agatgaaaaa tattttccaa gacacctgaa cacatgaatg 480  
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<210> 68  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA818474

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aatggtttca attaccagca ttgaaacaaa attagtgcaa aaaaagccaa atacaattgt 180  
gcaggcaatg gttttgggat cttagaggtg agcttgtttt tgaccagtgg gacaaatgag 240  
cctgggggtg atgtctcttg gttgtggtat catccttttc ttcacaaag gacagactca 300  
taccaggatc acaaacacac actggtttca gcaaattgat agtcacagtg taaacagggc 360  
caagcaacca aaacctaaaga acctaaagac gagcaagata aagacaatta gagtctactc 420  
atggagtttt ggcagttttc cttaaactaa gtgttttagaa ttcacaatag agaagagctg 480  
tttcaagatg tcaaagaatg aagtcaaaaa ataaaattc 519

<210> 69  
<211> 450  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA818490

<400> 69  
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ggtaaggggt gtcgtgggtg tccctgagaa gctcagttca gagggccttt gtctaagaga 180  
ctctgagaaa gggatgggtg gcaggaagct tggggaataa ggtattaag aagagaataa 240  
attaaagggg gggcttgagg gacaaggggc ctgtgctgtc cttcaaacag ctgggagcag 300  
accacgggtg ggaaagaggg tggcgggaag agcttgatag actatcttaa gaaacaccgt 360  
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cacatgcccc agtggccttc aacatggcac 450

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<211> 507  
<212> DNA  
<213> Rattus norvegicus

<220>  
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ttacactgac atatgaactc attcctagct tacttaaaac aaaacccttc tggactctgt 240  
atgccaatat ctagaggcat gtacctgggtc cttttatttt atccagaaag caaagctatg 300  
cagagaaaat tcctcagttt ctttattaaa aaatggcctg catatggcct gctacttatt 360  
attaagtgac atttaaatgt tctcaagaag ttggaaactc tttagaccag ttgtcctgaa 420  
atgactggac aatgccctgt ggatgttggtc aaaatgcagc ttcttatgaa ctggctcact 480  
ggggtgggag tggggtatgg tgggggt 507

<210> 71  
<211> 557  
<212> DNA  
<213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818524

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 attaaggatg taaccagttt ctaacatgag cctattttct acactgctta tgcacatatg 180  
 cccattaaca aatggaatgt tgctcggttac atttattggt ttgtgagtgt tttctggaaa 240  
 aactgcagtt atttgtgaag accaaagtgc catgctagca ttgcatgcat ccaaataatta 300  
 atgcacagag gcacagtaga gcaacaagag agcatattga aatactagca caccctatc 360  
 cccttttttat tgcttggtta gcttaaacct taaaaaccaa gtaaaaatct gaattcagcg 420  
 gtcaactgcc aaagaaagta acagcagggc acatacttag gacttgaatg aaattgttaa 480  
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 aaagtcctc aaacagg 557

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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818593

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 cagtgtttta gtgaaaggct taaattttt ttaattgaac tactagttca attaaaaact 180  
 caaaaaactc attgtgttaa agtaactata tacatagata aagtgggcat ccaagaggta 240  
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 ccagcagttc ccttcgaagc tggcctgttc ctctgcaccc ttcagggctc atgattcctt 360  
 gcgtagctct gtctgttggt gggttcgtgt agagtcgtat gtgagtcctc ttttctttct 420  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818604

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 <222> (1)..(515)  
 <223> n = a or c or g or t

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 tcaccgggtg gccaggtac gcctcggcga tctccttcat cttggtcagc accatggacg 180  
 agatctcttc cgggtagaac gaccggttct cgcccttgta gttcacctgc accttgggct 240  
 tgctgccgct gttcaccacc tgggaaggcc agtgcttcat gtccgactgc accaccgggt 300  
 cgccgaactt gcggccgatc agccgcttcg cgctgaacac ggtgttctgc gggttcagcg 360  
 ccacctgggt cttggcggcg tccccgatga gccgctcggg gtctgtgaag gccacgtanc 420  
 tgggggtcgt gcgggtgccc tggtcgttgg cgatgatctc caccttgccg tgctggaaca 480  
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 <211> 470  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818615

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 ttagagagaa cacagaccca ctcccaggc aggcaactgt ttccaatcc ccctcatgct 180  
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 ggaggaccac cagtgtggga ccagtatggg ataggatata taaggaaacc ttggttcttg 300  
 ttgtttttta agggaaaaga aaaggttaagt ttgaaaccga attgtgcaga accgatcaca 360  
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<210> 75  
 <211> 530  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818627

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 cacacacaca cacacacaca cacacacaca cccaatcaa ggaaaaactg tgcctcga 180  
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 aaatatacat ggcaaccaag agcggacata gagaaaatct ggagatgtgt attgataaac 420  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818700

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 aacatagtaa aatttttaata cagtattctg gatacaagta gaatagcact aagtaaagga 180  
 ctgtagttac ctcagcagcc tgggagtatg ggttgagatc aaccaagggt tagaatagcc 240  
 ccttcacatt tcatcagtgc tgaccaaagc caaagcaagc taggatggag actacaacta 300  
 accttccatg ttaaccagtt attttaagggt gacttaccct cacttaatgg cagttgagggt 360  
 aagttaaaca gagagccctt acaaagacta agaaccaaat gaaaacttgt ttctagcctt 420  
 tgttttaggt caccctaaac taaaatgctt ttacgtactt cttaacattc atgtacacat 480  
 tctttcaggc caaagtttca gcttggaat cttgccaaat gtatgtccaa cttctgaaca 540  
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<210> 77  
 <211> 557  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818702

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 gtgtagtggg gttggtggct ccccaaagac aggtccacgg acaccagggt ctccctcagg 360  
 gtctggatcc agctctgact ccatggcccg gccctgggca gcacgtctc tcacgattag 420  
 catgggatct ttgtcatcct gaagtcgggt ttgggggtct cctccacagg gtctgtattg 480  
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<210> 78  
 <211> 537  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818721

<400> 78  
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 ggaagaggct cgcagtctcg gtacccctca gagcggggag cctacttccg ctttctgtac 240  
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 gtaggttttc ccggcaacca gtcaccaact gatgggtgtt ttctgtgcca ccactggctt 480  
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<210> 79  
 <211> 596  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818741

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 aagaggctta cagtgtgttt cattaaacaa agcaaagctg cgacaaaaca ggatcacatc 180  
 aatagtagta tgcatacaga gagtgtagta atccatcaaa cacaattggg catctgtgcc 240  
 tttcctcaaa aagaacaaga gctctacact gaagaatatg tagtgacaaa gaagcattgt 300  
 ttgtaggctg tgaaggaaca taaactggca taatgtcact tattaattca agtctcgatg 360  
 acctatgacc tctctgtgaa tacaaagggg tccaatgtct taggcacctg ctcatgggac 420  
 tgtatgttta tttccagggt gcacagctcc atacaaagac actaaagatg ggtttggaac 480  
 atggcagcat ttacatattt gaaaaagttc aggcacattc ggatacaaaa gaaagggggg 540  
 gaaatgcaaa tagaaatttc tcttaagtct ctgaaacaca gtgcaaaatt gagaca 596

<210> 80  
 <211> 544  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818747

<400> 80  
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 ctgtcatata ttaaaaaacga gaataagaaa gcacacactg cgtataggaa gctgccttct 180  
 cctggaccat tttcacatta tctgggagac agaactgaaa caaaatacag tattcaccac 240  
 atgcaacact gaaaccatcg ctgcgtagac actgcaagct ctgcggagga atgacttctg 300  
 tgaggaagcc cctggtgacg ccgccgagat aatcacccat gagaagataa acagaactcg 360  
 atggagaggg ctaaaggcct catgccaaagt cccacagagg aatgcagcct tttgctctcc 420  
 aaaccctccc tcaaagccga ccaagcaatg aatcagaggg gtctgccacc tcggctgcac 480  
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 gttt 544

<210> 81  
 <211> 488  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818770

<400> 81  
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 tcggttccca gcctcccagg cttgtcatcc tctgaaggct gagtggggtg tctgccctgc 180  
 accacagctc ttctccaaag ccgaggaaaa cccatgggga atacagggtg agaggaccta 240  
 aggatcatgg gatgggagcc cacattgaac ctggtgagg tagtctgtcg cctgaggccc 300  
 acacgggtcc tgctgaggta aaatttgtaa gtttatttca gggacgtggg tcaggactcc 360  
 tcggtgccag agtcatcctc ttcattccca aagcagctgt cggcctcctc cacttcaccg 420  
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 tcgtgccg 488

<210> 82  
 <211> 561  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA818774

<400> 82  
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 tacatgcatt aaaaagtctt tcagctgctg cagaggaaac gtcagaagcg aggcctgagg 180  
 ccggagctcc gagtctgcac gggacacagg cgtacacagg tagctcacag tatgcacagg 240  
 ttaatatgag acacagtgac accggtggct tggcttggct ggcagctgcc agtaogatga 300  
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 ggctgtacaa ggcttcgggtg tgtagtgtgc tctgggttgg tcggaggttg gaagcaccaa 420  
 agacccttaa cctggctccc cggcaggcgg gacaggggtc attatttttc tcctggccag 480  
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561

<210> 83

<211> 606

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818781

<400> 83

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aagcagtgat acaccaaata caggcattat aaggattttt tttttaagta agtatctgtt 180
tagaatacaa tggtacaaaa gcaagaattg gattttaata aaacaattta ataaaacaag 240
gcacaatgtt taaggcaaaa tttatgaaga aagtatataa agttaatata agatcatatt 300
ttttaatatc ctttggggaa agaggcacia gaattagaaa tagcttaaac atttttttag 360
aatattagcc ataagaaagt aaaataaatt tgatacaata ggactctatt tttccagaa 420
aacaaactcc actgttgaat catatttctg agttccattt taatcatata tatatttata 480
cagatatttc taatacacag actttaagta cagaaaatta agatgtcaga gcatatgtaa 540
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ccgact 606
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<210> 84

<211> 563

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818796

<400> 84

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tgtacttgac tttagtgggt agattcttag ctgtggcatg gatacacatg atcagaacag 180
tattaaataa ggagaacgtc attgaaaaga gcaatctgtg tgcatcaaag aacattatca 240
agaaagcaaa gaagcaatgt gtataaaacg tccctaatag gttaaactac atagataaag 300
agaagattgg tggttagaca accagaggga ggaagaatgg agagtcactg agtaattggt 360
acagtgtgtt tgaaagggga taaagataag atcgtggcct gattttaccc ataaattggt 420
gattctttac acaagaataa tggtttagagg aatgagccac aatagcagat attatccaac 480
cattaatgaa acttatgacc acttcttaaa tttttattta tttttttaa atttacttgt 540
ttctgcataa ctttgagtga tgt 563
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<210> 85

<211> 407

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818801

<400> 85

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agagtaattg cccattgctg gtttgtggaa ttgatccaat tccttgaaaa ataagcatgt 180
gtgttatcaa agcagaatct cattggacat caagtcgtgc cccagtggat ttctcccaa 240
caacaagagg cgtgaaatct ccagagccag caggagtgc ttgcccttcc atttctaagg 300
gctgttcctg cagctccagt gtgacatttg cttaaagatg aagccagccc cattctaaat 360
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aaaggtatct ggacagccct tcagcgatga atgttttcct cgtgccg

407

<210> 86

<211> 582

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818907

<220>

<221> unsure

<222> (1)..(582)

<223> n = a or c or g or t

<400> 86

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aagctatttc actttttccaa aatgctgttt ctctttgtag accaatctgg ccacaaaagg 120
ctacctggct aagtattagc cagaaacttc taaatcccag tgtgatcttc ttgtggcatt 180
tttccaacaa ataatgcaga ccaaatacaca agatggccac ctcaactggc acatggtcct 240
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tgcacacagg ccttgettcg tctcctcatc ggcccatctt ctggtctcct tcctcaccac 360
aatcttcacc tgaacagcag tcaaaaggcg cggctcggtag gccgcggaat tatcactgcg 420
catgcgacca ttaggggtccg tgcttctact gccgaaatgg agaatcccgg ttccttagca 480
gcaggctccg tatcccgcgg ccactgagga accatccggg gatgcagacc gagtacggtg 540
ggctggagaa ctggggagaat ggggggcggn gggcaagact gg 582
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<210> 87

<211> 612

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818910

<400> 87

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gcctacaagg acatattcag caccataataa agattacaa cagccataga atataatcta 180
taaagcaaac atttaatat gcactttggt tcgcaaacat tttggatttt acttttccta 240
aatgaaaaat taggaattca agatagcttg aatactagag cgcaactgtg accctcagat 300
gttatgtcag gaattgacca atatttagaa tagtgtaat cctcaaaaaga gtaaagaaat 360
acttaatggg aaaaataaaa ctttacttca ccaactctta aaataatttt gtcaccaatg 420
ccaattatca gaatattggt cattcttgct taataaagta tttttagaa catggtagtg 480
agcgcgccga ggccatgcac accaacaatt gttccctagt cagacataac acagagtcag 540
gtgtttttac acaatccctc ccaacaaaaa caaatccacc aaatgccctt tatgccaaat 600
atcccatcag ct 612
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<210> 88

<211> 412

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818921

<400> 88

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 tttaccagct tctcaaattt gcctcctgcc ttcagagact aaggtactac atatacagat 180  
 tttcaatttg tttttactct ttacacagaa aactgacact atttacacag actgtaaata 240  
 gtatcttagg gagccaaatc agagtaaccg tacttgtagg aaatgaactt catacaatat 300  
 aaaagtctta agaattctat agtttatata attatattat ggcaagtctg tgacaatata 360  
 tagtataaaa catgaagtat ttacagttag gtaaacaatt acataagggg aa 412

<210> 89

<211> 598

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818947

<400> 89

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 aaagcggaga aaagttcaca tcagaatgaa acgtgcgacg ccaacttgga tttctgaata 120  
 catcgtggac tcagtgtctg aatatcagct tccaactacg aagtcggcaa ctaaaccggcc 180  
 ttaccacacc agagcacagt ttaatcttcc atacagacat tgtacatggc atttggcata 240  
 agacttgctc agaataacat tgcaacggag tggaggcgag aagattgtta tgcaaacaca 300  
 gtgatgaggc ctccactactga aagctcacac tccaaggata gaaacttttc cgatagcagg 360  
 ttttcagggg gcagaagcaa tgtgtcgtgt cggaactaag ggtgttctgc acacgctaca 420  
 aaacagttgc atgggtgcct gaactctagt tggcaataat tatccacatg ccagaaagtt 480  
 cctcacacaa gcaacagagt gcccacaaaag ttggggctctg agaaaacatg gcctgtccag 540  
 gattccctga tagacactca tttttcaacc acagaatgct gtgctgacag cagccagg 598

<210> 90

<211> 491

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818951

<400> 90

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 gtgcacgagg agagaggcca aagctgttgg gaaagcaagt cagggacagg gccaaaagtc 180  
 atctacatgg gaaccctggg cccccagcct ctgttcttgc ggtctcctga ttccaggcca 240  
 gggctgggaa ttctctggaa aactttctac aggagcaaag aacacagaga taatgctgcc 300  
 cttctgtgat aaagtcagag ggtttccaat cctgcattcc tccttcaacc ctggctcaag 360  
 tagggccatg aaaaatagct gggctctatt gcatgtttca gaggcattaa tttttcctgg 420  
 tgtcccagcc caccagcgcc acactatggc ccagagtggg cactacaagc gttgctggcc 480  
 taatggatag g 491

<210> 91

<211> 498

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA818996

<400> 91

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 tgggtcttct ttgagtgtga ctgttcgggt gaagacaacc tgtccttgat ggctatccgg 180

atccacagag aagtacccaa ggcgctcaaa ctggaacttg tcaaagggct ttgccaaagc 240  
cacagagcag tccaccaacg ctccctttaat cacttgtagt gatgccgggt tcaagtcact 300  
taggaatcca ccaggcactt cgacagggtc ttcagggttc ttgtgctgga atagtcgctc 360  
atagaggcga atctcacaca ccagaggctg tgacaccagc tgaataaagg ccttgggctt 420  
ctctccagca tcagctcgtc tacagggtcac ctccaagcat tccacacagc cactggagcc 480  
cctgacaaca tgctgcag 498

<210> 92  
<211> 188  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA819021

<400> 92  
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gggtggcacgt gtcaagttcc acagagtcct gccttgccgg gtgtctgaat gtacagctcg 180  
gggtcact 188

<210> 93  
<211> 318  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA819041

<400> 93  
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actgtaaadc tttctaaadc tctgcaatgg ctctaaatga gggtaagtga ataagtggaa 180  
gtgaaggaga atggagggca ggagggtggag ccactccagg taccaacca cccagactcc 240  
tagctagaca caccgattcc ctattaatcc actccatggc taccagaga tcccaggact 300  
cagggcatag ctgagaga 318

<210> 94  
<211> 583  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA819055

<400> 94  
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aactattcag aaaagaagat aaaagatagc acttcctttt gccttgctta taggtatgct 180  
agttggtttg ggctgttggt tgattttctt ctttgaatcc ttatatgaca actgctggta 240  
tgatgaatgc tggctccttag gtaggagact ttcagaacag ttccagctca ggggtgatca 300  
ggtcctgtga tgaagtacat tgtgccttct gcaatatgtg tttatcttcc accaatgcaa 360  
tgcaagtaag tagtctctta ggttctataa gacaaccctg accaacaact tacaagagta 420  
tttctcttgt ccagtattac tgtatttatt aggtgatcgt tgggtgtttg aggggacatt 480  
atcaaccttt caaacacat gatcatttat gaagtctact aagagtgtga acttattttg 540  
agcagggtggg ataattgatg tgaccatcaa tgcactgtgt acg 583

<210> 95

<211> 281  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA819111

<400> 95  
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gttgaatata agagttaaac taatccacac cagctcaaaa accctgtgga gacttagttg 180  
ataagaatgg acgccacag tgattctcaa ccaattacaa gttttcacag aacacagtaa 240  
acgaaaaggg taactatgag agtcagtaca aatatgctag a 281

<210> 96  
<211> 555  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA819140

<400> 96  
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aactcaaaag acaccagaga cagctttttt tttttttttt ttttttttgt tttttttttt 180  
tgtttggttg ttttgctttg tttttaatag gcatgcaaaag attaaagtag tgaaataaaa 240  
aataaatgac cctagattgg gcaaagaaaa ccatctttat gaagaagaaa tttaaagtgt 300  
ggatcaaaaa atttaaaaga cctggcctta tgggtgtgtg tttatcggtg atttaaaacc 360  
aggcgaaagt ggtagtaggc aaatttttaa aaagtgatag agtagcgatg gtattatttg 420  
aggtaaacat tatgtattca ctttctgaaa tctacagtga tcttaacttg tgctttcaat 480  
caaatgtggt aaggtgggca catgcctcca taccacata catagcatgg acccatcact 540  
tgtcagtaac tcagc 555

<210> 97  
<211> 444  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA819172

<400> 97  
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cgatgaaaact gctactgaat ttagagaggt gatgtccgcc tataagagca ttaaagagtg 180  
attctgctct gctcacacgt cagtgtctga aactgtgctg caggttagcc tcagcagttc 240  
tgacaatttg aaaaacaaca gcaatacaac aggccaccag atttgctttc ttcctaagaa 300  
actcaattat aaacacttga agtaataggt gagaaggcag atcaagcatc accaggttta 360  
agagcaagaa aggaaaaggg cagaagtgc cctcaaatca ggtagacatt aaatgccaga 420  
aagaaaataa ctcacaaaac tatt 444

<210> 98  
<211> 351  
<212> DNA  
<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA819199

<400> 98

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tttttttttt ttttttttaa gggcaaaaca aaaatgtttt attaccccaa aaacattaaa 60
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cgaaattggg gggtcaaggc caggtcttgg ggcccttttt cggccatcta aaaaaaacat 180
ccacctaaagt ttaactgggc ttgaaccggg acaaaaactt cacttcccaa cttaaaggcca 240
cccaaggga aaccttgtac caagagccca ggtaaaatga cttggctgaa agccaccctt 300
gaggaggttt gtgaccaatg ggcaattgga acccaatcaa gggaccattt g 351
```

<210> 99

<211> 621

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA819306

<400> 99

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aacctgtacc aaactccaga taaaatgggt tgatctgatg gatttggccg cacatttcct 120
gtatgtagaa catactggat tataaatcaa caacacagggt cccacttggg aaaacgtaga 180
aataaaaaaa agaaaagaaa aaattaagtt aaagtattag cacatataca gtgtcagaag 240
gggtctccgt caatcaccat ttgaatttaa cgtttttcct ttctgaatgg cttgttttgt 300
tccacgaaag ttggactttc agaagtgtct tctaatacaca tcataagaac acagtactcc 360
gtgacatgcc tatcaattca cgtcaccttc tgcagattcc tttctgctga acagtgccca 420
ggaggctgag gcttattctg ttttatgtgc ttctcacaca ccgagaaatc aatcacagga 480
atacatttta catcctggat actacagtga aactcggcct aaatatcacc tactgctaac 540
acatgacaga atgttttagct attcaaatgc ttcagtaaag tgtatcttac caagagaaat 600
gtgttttgaa tcaaactttt a 621
```

<210> 100

<211> 336

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA819333

<400> 100

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ctttctcac agtagtcaga cgccctcact ttgtatgaag acagccactg gcaggcctag 120
aaacacatct ggacctgaag caggcacctg aggtcgtacg caccacagga aaaggctgtg 180
ctcaataggg ctgcaaaatg attttggtc tggggactga aggaggacac actgatacag 240
aatcaggggt atgtgactct gagcgacctg ctgtcacctg gaccaagcat gtcaaatggc 300
gtttagggga gtttggtcgg tgagtcaaaa gacttc 336
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<210> 101

<211> 402

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA819383

<400> 101

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ggactttaca agactcggaa gccagtaact acaaaggatg ataaataaaa tacaaagcca 120
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gtatgttggtg gcaaatttcc agaaaacaca ctgaaaatct ttacagttca gaactgcttc 180  
 actttataca taattacaaa ttactataca gcgcttgggt tgaacccgac tttttactta 240  
 ataggcttag tacagaaatg ttcatacagc atttggagac aacaagaaca gaggtatagg 300  
 tgtatcctgc ccaccttctg tacagcctag gcctcagggg caaacctgag acgaacccgc 360  
 tgggttaggc ccattcccagc aggtggcaac caaggcaggg ca 402

<210> 102

<211> 529

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA819530

<400> 102

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 acgtggaatg gcctggtgag acgaacagtt tcaatacctg gttacagagg cacaaagtca 180  
 tcctgatgac accggtcact gataaatccc cagggacact gggatcggag aagaccgggg 240  
 tgccctgggt ccagcgtgct ggagatttcc ttcaaagtcc tgattttggc aaaagaactt 300  
 ggcaagctag caagcgaact gttcggccgt agagcgtgac gagggagggg ctttccacgc 360  
 ttgggtgggt gagtaggcgc ccaacgcagg gaacaatgct ctctctcat ctgtctgcac 420  
 gcctaccctt cccactacac ttctaggctg cagagagcta gcccggggtc tgtagaggca 480  
 ctttcccccga gcgggtccga cctaactaac ctcaccaaac tcctcccca 529

<210> 103

<211> 485

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA819672

<220>

<221> unsure

<222> (1)..(485)

<223> n = a or c or g or t

<400> 103

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 aagcacaaat caaaccaaca gaaagatagt tttttttaa aaattatctc cttaggcctc 180  
 tgtctttaac ttccccttgt tcctatttct atgagagaga ccgtaacgca caggctgagg 240  
 agacacactg ccaacaaggc taatgtgcac cagaccgaag agggacagct cggctttggc 300  
 cagccctctt cctgcaggat accaatccta tgtttgcgtc aatcctgacc tgctcagatg 360  
 aagcggcact caggcactag tcagccgttg accatacaag aacagagaac actggagtag 420  
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<210> 104

<211> 597

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA819709

<220>

<221> unsure  
 <222> (1)..(597)  
 <223> n = a or c or g or t

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 atactgagta gtgagggtcac agtcacgaag acatgggttc acattatgga ttcaatagac 180  
 tcaagttctg aatgcagtat taagtgacta caactgaaat gctaagtgcc acgtttgaaa 240  
 ttgccagtct aattgagggg cgaagtgatg aatcagagaa agatttggca gcatgactca 300  
 ggaggacagc acaggaaga gaggtactt aagagcagta aagggaaga gagtcaatca 360  
 actcgggtgca gttgcgttca gtcgagtcag tgcagtcagt accgttcagt tctggagttc 420  
 agagcagact ttccaagcca agagaggcct gtttcaatca gtcagtttg agacgggttt 480  
 gaaccagaag agctgagttg aaccagccag ccagagttta gcaagaacta cacaggggtga 540  
 gcttantcat caatgagcct ccgaggcaac aattacatcg ggtgcataaa gttactt 597

<210> 105  
 <211> 478  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA819744

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 ttacacacca catcagctct gaaaggggtga acgcatctga gccagaagcc cagtctctcc 180  
 aggccatgca atctgttcac tgatgggaca gtccctcaaa acagccacac aaagtagaca 240  
 gatacagctc ccccgaaatgt tcccgatccc cctgaaaaca gagtgaagt caatgaaaac 300  
 tggttaattaa aaagccactt gggactggga gtaacattta atgattgaga aaatgcttaa 360  
 aataattttta tgtatcagag acaaactgct tgcactctt tcattgatct taggaatttc 420  
 ccagacacaa aaatctccat tatccagctc cattaaaatg agaagaaaaa atgtgcta 478

<210> 106  
 <211> 463  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA819767

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 aatacatgga gaactacact ctgcctccct agacgcaaat ctggaaccca gtcctctaac 180  
 ccaattcaaa cctttgtcac cagacacaga cacggttggg cagttgctta aaccgttacg 240  
 ttacacgtag ctctttatga ctgtactgtg gaatatata gctgaaaata ctgttgctga 300  
 tttcatatag aagtctttta tataaaaaaa ggcgtataat acatccacct agataaacca 360  
 actgaaaata tttcttgtaa gtttaaattg tttgagagtt ccactcttct attgttaatc 420  
 gggaaattat cagcctgggg gtgccaagct gctgctgatc aaa 463

<210> 107  
 <211> 615  
 <212> DNA  
 <213> Rattus norvegicus

<220>



<223> Genbank Accession No. AA819812

<400> 107

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tcttagtgta tacatactca catcaaaaata taaagaacac atgaacgtat accagagtca 180
gaggcgtgcg ctctgctaca ccttgccatc gatcttggtg agacagatac actccattgg 240
aaaaacccat caataatgat ttttaaccaa ctaacttcct gtgatctgta gtaaccatta 300
tgatgtctgt atgaggtagt aactaaatta ttttggccat gtattaatac tctaaataaa 360
aagaaatatg gaagtcataa taaaataagg ccaacagaag taaaagtcca tgaaaaacgc 420
gaccatgtca ctgtggaatg tgacggctct tcagtgtgac tgaaatgtct agtgtggagt 480
cctcagcagt gccagtctct cctgtgcaca ctgtcgccct ggcgacagct gcagtgttct 540
accacggtac cgccattctg tgatttacgt tttgcaaagg tgtgtcctaa gcacagacaa 600
gctatcgcac acgat 615
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<210> 108

<211> 593

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA819816

<400> 108

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tctcgttaca gtacactctg aaatatttac agtatgatag acttaaagca gagaggaaat 180
cacagcaaag gtaagccttc tagatccact tgtgggtcat taagagtata tgcacaacca 240
cacgggagag acaaccagcc tctcccttca tatatatcc tttttatttt cttatttttac 300
cttcccaaaa cacagacact caacagtagt tagaatggtc atctcccaac agttaaaaag 360
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ccactgtgga gccttttagtg gtgaggtctt ccgatctcag tgatgtcttc aacatacacc 480
atcatttttag tggaaaaaca attgatttgg tgaaatgaga ttcatttcca gacaggttag 540
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<210> 109

<211> 254

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA819840

<400> 109

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aaagtacttt gaaaggtgat ggataaagag actcggggct gctcaggaca ttgagaataa 180
gtgacggcca tgtactcagc cctaaggaag atgttcaagc tacctgccct ctctaagcat 240
cagagaacaa ttca 254
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<210> 110

<211> 413

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA819853



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tcattatgta atgaaatata aacataccat catgttattt taatgtcttc aaatacatga 360  
tctgaggggg gtgtgtcaca cacttggtga ccaactctta gttgtgcctt gaacatttgc 420  
attgactacc tgcaaacaat tactagggtta actagaattg ctatgcagtt ctatcttgca 480  
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<210> 114

<211> 564

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA848437

<400> 114

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ctcggggtgt gaacaaaccc tcggggcatc ttccgtgtcc ttttaagtcag atagaagtat 180  
gagcctgccc taagaacctc attcgacctc aatcacaccc ttaaagtact atctccaaaa 240  
acacttactt agcatttggg gcttccacac ctgaacttta gaatccagcc catagcaagg 300  
acccacatt gtctttctgc catccctcta cttgctacgc accatgattc tcagacagga 360  
atgctgtaaa cccgatccca tagtttgtaa atatctgtta aatgactaga tccatttaag 420  
tcgagctttg ggcttcagag tagtaagagc ctttggccta cacagaatgc aaagtctgga 480  
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<210> 115

<211> 467

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA848563

<400> 115

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cttctccaga gcatccccgc cgccaagcgc aaccttccag aagcagaccg cagcgacatg 180  
gccaagaaaa cagegatcgg catcgacctg ggcaccacct actcgtgcgt gggcgtgttc 240  
cagcagggca aggtggagat catcgccaac gaccagggca accgcacgac cccagctac 300  
gtggccttca ccgacaccga gcggctcatc ggggacgccg ccaagaacca ggtggcgctg 360  
aaccgcgaga acaccgtgtt cgacgcgaag cggtgatcg gccgcaagtt cggcgacccg 420  
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<210> 116

<211> 497

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA848639

<400> 116

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tcctcccaag ttcgctatcc gtgtcacttt aaacagcatg ctgctttgtt aagttgctgt 180



actaatgtta cctcagccag ggtacatgcc acctgtacat agcacactct acataaagta 180  
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 tagtttttaa tctgacttgt gtaggaaaag acacacgcca tgttttttta agtctgtggg 300  
 agaataatgt ctataaaatc tattgagaat cccaatctgg tcaaagatgt gtcattgggc 360  
 agtgggacca acagcaccca ggtcaagccc tgggtgggaa gaatccaagt ttggctggag 420  
 gaaggagctg ggggaggccc tagttaggtg tccccagaga ccgtagtggt tcagacctga 480  
 aggaagaaga gaggcaggat ttgaaggttc aaatcccagt ggatctggga ggcggtagg 540  
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<210> 120

<211> 401

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA849222

<400> 120

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 accctgctga ttgacccttc tgggcctgct tacggactcc tctcaaaggg acagccagcc 180  
 cctgttcctg ggaggaggct cctcggacac tggacagagc tgagcttggg acaccagaga 240  
 gaacagggca cccttctgca ctggcttcca gaaaacggtc ctccccgagg acaccagtg 300  
 gatgagagcg agtctgagag aagaatgaat tgacctctat ccttccccctc accctcgacc 360  
 caggagggaa agggcatttt ctttttcacc tttgaaaggc g 401

<210> 121

<211> 268

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA849365

<400> 121

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 ctggatcttg atccctgagg gaggcttgag gttctgaaca tggatggcag atcacaacca 180  
 cagttctggg ctcatctgga ccaccagtcc ttgggcctca aaagttgaac tcttggaacc 240  
 tcaagtccca acgactttcc ctttggtt 268

<210> 122

<211> 395

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA849426

<400> 122

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 atgctaaagg cctgctgctc atccagttgt cggccctgct tttaacaggg tctgttgtcc 180  
 atggcaaagc agctgccttt ttgtctgcac tggacagcag cagcagcagc agagtctgca 240  
 gtgctctctt cccagtcatt gaggctgtgg gtccctgtcc ctgcccacat cctgcctctg 300  
 cttggctgag cctgaaggag ggcacgacac cagttagccc ggcccaagcc tcatctactg 360  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA849497

<220>  
 <221> unsure  
 <222> (1)..(535)  
 <223> n = a or c or g or t

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 gttaactccc ttggttctag gaccagcata tcttaatctt tcaacgaagc agatgatatg 180  
 gaagtcctct ggagactgaa gccacttgcc tagtctcttg agcaaataaa cagacactgc 240  
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 acttacactc tgcataagcta actctgggta aggacatggg gttcaagtct ctgttctggg 480  
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<210> 124  
 <211> 501  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA849767

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 cacaccagac acaagcaagg acccacgggc actgagcagg atgggatggg taggacggca 180  
 agtctctggc agccgatgac aaccgcgcct tctcaggaca ctggattagg aaccaagaaa 240  
 ccaagcagta tcgttgatc cttccagaat atctaattct cacatttgcc gaggggctag 300  
 cctcaaacc accgtgtagc tgagattcca ggcatgtct accatgccga gctttaccgt 360  
 ttgcctctga aaaccgggac agtaaccttt actttctaga gctgcctgaa ggggaaatgc 420  
 cacagagagc aacacttacc aaagtactca acagagctgg cacacagagg tatctaatta 480  
 gtaactcttt tttgtttttg t 501

<210> 125  
 <211> 582  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA849796

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 tcaaagtcca gagttaggat gccagggctg aggcgtgcc tccgacttaa ctgctaaatc 180  
 atgtggggag tgatctttga tactttaagt caacttcaat acagaactat cttttgggta 240  
 ctccatacag ttagggaact tgttttctac acttaggcag gacccttcaa ttaaaatgga 300  
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ctctgattta gtcttttctga atggactggt ttctaacctg gactaagtac aggcctgaaa 420  
 cttcaacagc catcaggaac catggagcgg gccatgaagg tgcttcgaag ggccacagac 480  
 tttttcaacc tgggacagac tgcaacactc gtgccacacc ccatatgaca aaaagctgga 540  
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<210> 126

<211> 196

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA849898

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 atttctggac acacggaaac caaaggagga gcctggggac aaaaccatt cgggggacaa 180  
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<210> 127

<211> 504

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA849917

<400> 127

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<210> 128

<211> 513

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA850038

<400> 128

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 tctaagatac tgaatcaatc acgtcaccta taagtgccaa cagtgttatt ttgtcatgct 180  
 gatttcaatg gtacttttta aaaaggggga aatatcaaca attataatac aaagggttg 240  
 catctataca aacagatata ggattcataa caattcaaga actaaggggg ggggaccaa 300  
 ttcaaattac aaaagttcac tttttattca aaacctcagc ttgtgtcttg gacacgttcc 360  
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 ttgtcatggt atggggggg ggtggggaag ctaagtgttg atgtgatccc tccagcttgc 480  
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<210> 129

<211> 419  
<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AA850195

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aaagaccatt agctctcctg ttacagtttg tgtacaacac cctcatttga aagtgcgcgc 240  
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tacgttttag aaatggaata aagtaccaat ctcagtttaa atactaaaat agaaataaaa 360  
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<210> 130  
<211> 492  
<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AA850378

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cacctggcac ggaaagcgtc attgcatctt aggtcctgct tgggtattata agagactaat 240  
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acactctagaa aggcattggt tagtgctatt aaaaagctgt gtgctcatgg ggaaggctcag 360  
tcgaaagtta cctggtcata ttcttactcc tcatctccac tgtccatgtc aatgtctact 420  
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<210> 131  
<211> 617  
<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AA850480

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aaaaaatata ttgcaagtta gatctaaaaa aggaaatcta aattgcctca tagagaaagc 180  
cagtgcgtga gcaaaatatg tgactcaaaa ctaaaagaaa cccaaccaag aaatagattc 240  
cacaaaagtc agttaatcct ccaattttta ataaatgatc tcccaaggga aaataattcc 300  
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gacatgaata tgaatgcaca taaaaacaag ctctttgact attagttcag ttgagcctca 540  
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tcctttcttc accttgt 617

<210> 132  
<211> 531



<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA850618

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cttcacgcta tcaccatggg gacatcgtct gagaatccgg taatcatggg agcatcttcg 180  
tcgtcctctc ctaggtcatc cccggaggag aagatggcgg agcccagcct ggagctgtag 240  
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gcaaagccga ctcccaggct cagcaggact aggaacaaga taggaaccac cacggccgcg 360  
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tacagcagca cggcaggctc cccgcagatc tggctaccaa agagacatcg agcctggacc 480  
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<210> 133  
<211> 580  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA850738

<400> 133  
accaggcaca gttatccaat acgcagacca atacacatga cacggccaat ccgcttatta 60  
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aattgtttat acttacagat cttatggtac cctaaatcat tattaataaa aaccagccaa 180  
cccatactgt aagtaaagtt agcagaccac cacttacgct ttattgtagg agaaagacat 240  
ccaattacca tgctgaaatg gggttttagag tccaacacag acatcctgct tcaaagctcc 300  
cactgcactt acaacccag gaacggggct ttccttcca tattacattt ctaggacagc 360  
tttgggctga aagattagtt ttggtttcag agcgaatctg atttagtatt tcaatgtcac 420  
acctcaaaga ttcctgacgg gaggttgggg agaactcact caattacgta ctagtcacag 480  
gcgcaagaca gcacaacaca gatgggacat ttaattcact ttaccggaca tgctcaccga 540  
accgaaattg ggaaaattta aaggcacaga tgaatagaaa 580

<210> 134  
<211> 438  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA851050

<400> 134  
gatgaagtac acggaagtta gcacacctga cggatgacta tagcagctaa tttttttttt 60  
tttttttctg tgcagcccag ggtaagctca aacaactcaa aatcctccag ctacagcctc 120  
atgagcgtcg cagttctggg catgctggc ctctcccgcc ctagcttgct agttttatat 180  
gatggtaagt ctccatctat aaatatgcaa gtgtacagaa tacatgtgtg cttttcgacc 240  
tgggtgttct gtatgggaaa gctgccccga gaggatgcta cctctgttct tctgtcttta 300  
gtgatgttta aatggtttgc attattttca tgaaatgaag tgcgttaagg ttaggagact 360  
gaggctggta aaggagaagt ttcctggaga tgactgtgtg caagagggaa ggccacccaa 420  
gggcccttcc ttctgagt 438

<210> 135  
<211> 494  
<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA851233

<400> 135

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cattgtaagt ttatagttaa aactacggat gaacatttca gtgcaccaca attccaaact 120
gcaacgaaga cggtaggtac tcggggatcc agctgaggag agatgggtca ctgcagctgt 180
actctgtaag cacctattag caacttcacc ttggcaaagg gtgcttccgt caaccttata 240
aacaacttat tggggccagc aacagggctg aatgaataaa caaagtgact gtccagaaaa 300
acaggtagct ggaatttatc atttagcacc acggcttgca cactgcatgg tccacaaagc 360
cgagcaatga catctttacc caagaagttt gcattggaaaa tgaagaggag gacaccagat 420
ccttcaggca tgttctgagg gggcattgta ttgaaatctg ttgagaaatc gggccactca 480
cagagccgat gaca 494
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<210> 136

<211> 719

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA851329

<400> 136

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acagttggat gacattctga cactacaaag ttctttttct ggctaattga accagaatgc 120
aaataactgaa aagattgac ctaccggtaa ggaatgagtc agggtaaagg aaaggcatgc 180
agggcactaa ttgatattag caaattttgt tctcactt agtcagcagg tcttaaatcg 240
ccaacatcag ctccaacct gattctatct ccacatcaaa cagattccat gaatcataac 300
cttttagtac agatttttaac gtcctacaaa ggaatgggtc accagaggaa cctttacaca 360
gacctactga cctagacctg cctctgtaga ccaggggcct cttaaatcag agctctatct 420
gcctccagag ttctgggatt aaagggtgcac accaccatac tcggccaagt cttgctatta 480
aatcatacta ctatgttgct taattccatt tctgaagggt gtgttggtat ggacaacatt 540
ctgtaaataa actatccaat aaattacaga ctctgcttat tctgaaagggt tatggtttca 600
ggagaacatt caggtgatg gaatctcatc aacttgctgt ttcacattca gttcttttga 660
gtattaaaaa aaagataaaa cagacagggt atgtaagtgt tttatgcata cactgcata 719
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<210> 137

<211> 574

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA851343

<400> 137

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tctctcagtg ggaatggaca ccaagggtgac acatgcagca agtccataga cagggtctct 120
agcacatgat ggctcctct atgacctgct ctttgaccct agtccaaca agggcttgac 180
aggccactgg aagcatggac ctaacctgct gcatgccatc tccacaggat gccgcctaac 240
ctcaggtgac agcacatcag gagctcacgg gcgcgctcac acgggcacgc tcacacaggg 300
cctgtgcagc acaagattat ggagtcacct cctttgatcc taagctggcc tggctcctcc 360
atcagcctca gggagggtata ggaagatgaa tataggccca gctttctgag cttagctcaa 420
ccacagcttc tggctaagct ctggaccacc aggggctgga gccttgacc agggatggga 480
tagtccgttg ctctgtagg tcagctgcac acgcactgcc accatcgagc catggcccaa 540
tgacaggatg gctgtgtcgc cttccttgat cagc 574
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<210> 138  
 <211> 545  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA851803

<400> 138  
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 gaataacatc tgaaagacag aataataaat atagcagtgc gctcaccact actgccacta 180  
 ggcttgtgta cacgcattct gtatggacta ctctgtggat gttcacactc tccgcctgag 240  
 aacacagagc atattacact ccagtgtaca agacttcagt ctgacagcat tgctctacaa 300  
 gaaagaaaaat taaaatgtct acttgacact gcagggaagc atgggcacac gcgcacacag 360  
 acacgtgtct gcattttctc tcacactcaa acagaagcac acgcacacca cagaagtcag 420  
 aagaatttac ccttgtgtgc cagacaatta acaatttcag aaatgcagag tgagtggaga 480  
 gtcggccgat acacttaacc cgtaagtaca tggcaagggt tgtaaatggg gtgcaaagtg 540  
 cgctc 545

<210> 139  
 <211> 294  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA851814

<400> 139  
 aatgagtatc ttatgtacac acacacacca tacaacaagc ttggttccat tataattcca 60  
 tcaggcgctc aggtatgttc aatgacctga gatagagttg atgaagcatg gccttttaggt 120  
 cacaatgaag tccatcagtg agttgtcagg ctgcagtgtg gggattggga catctgtac 180  
 ctggatgatg ttgacttcta ggattccatc tacaattgtg atgggtggctc tgaagtaacc 240  
 atatctgttt attcggcagt tttcattgga aatgtcactc agctccatgg attt 294

<210> 140  
 <211> 591  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA851953

<400> 140  
 aagcataatt aaaatcaatg cagaaaaata ttagctacat tgggtaaaag tagtgattgt 60  
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 acagaatgga gggatgaactg cgaaggctct gcattgctta ctggcttcca aaggcattca 180  
 gagggctcatc aaaaatgttg gacactttgt tctcagacct taattcagat gctgcctcag 240  
 cagattggct tttgggttta gatgctttag cctggaggcc agaggagaaa atatcatctg 300  
 tatcatcgtc aaacatggac ttggctgtga ctttcttttt gggcttttct ttgggtttca 360  
 cagtcaagtc agcgaagata tcaatattat catcaaataa gttgggttcc aaagtctctc 420  
 ccttctctct tttttttgga aaaggcttct taattgcttc cgtagcaaat atatcatcct 480  
 caaagatgtc ttgagttttt gacacaacgt cctgatggct gtcagatttc cactgattct 540  
 ttttgccttt ctgatctgca aagaggctct cctcatcttc aaggaggggg a 591

<210> 141  
 <211> 538  
 <212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA851961

<400> 141

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ggataaaaaac agtgtagtt taagactgtt gggggaacgg tggggctcag atcaaacaaa 60
gacagtaaca ttctcagact cctatccacc catggcctga ccccttcttg tggatatccag 120
cctccaggaa gactagatag ctacactggg gttattgcta ggcattctagg gaggggacat 180
caaccagcct gtgacctcac ttccaactcg ggcacagccc cactttgttg gccagttttt 240
gtcctgtcct taccaaggcc caacgtcatg agcagctctc tccgtgtctc tggagcctgg 300
agtcagtgtg gccgggtattg ggggctgtgt cctgggaggt gagtgaattt gcctgtatca 360
ctcaattcca ctttacattc cctaactaca gaggcagtgt ctcagtgttg gagccaggaa 420
ctggccctc cagtctgggg atcattagat gaagtactct tccttctctt tgcccttggc 480
tgagtcagtc tccatctgga ggatggcgct gggctcccct tctgcaggct cataggtg 538
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<210> 142

<211> 538

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA851963

<400> 142

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gttattagcc aactcgggtga attcaagaca ttgttcaca caatgaacaa tcgcacacat 120
gagaactgca ctagaatgt ccctcctaga atctccatcc atccagtcaa agtgctgagc 180
tactgactg aaggaaacat gacctgtgtt ctagaacgta gctggctatg aagtttactc 240
atgtgtaaat tccttaaaaa gattaaattg ttggcccat ttctatatatt cataaaataa 300
ctataattac aaactttcta aaaataattt tacaaccatg taattatgac taaccatatac 360
atctaaaaag taagtgaagt cattgtccta gagattgtct gagattattc tgctgagaag 420
cttacttcaa actcttatca ctacttccta cttccagtgt cttgaatta agaacagaaa 480
ttgtaactat gctattctac atcagattga cacaacctac ttctaagtac actattgc 538
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<210> 143

<211> 432

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA851967

<400> 143

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tggtggcatg tccaccaggc cttttcctgc tcatctctgt attgctaccg aataggactg 180
gatgcctgta tggagagtgt ttggttggc tgggtttggc ttaaagaaca agcaaaaggg 240
actgagggga ggggacagct gccggtctg ctgtcccaca ggcattccct tcatgcagat 300
tcgaagggtg ggtctagtgg ttggcgctg cccctcccag tatcccagg ggctccgtta 360
cccaggcgac atagaagcta ccactgaaa aaaaacgcgt cacacgggat ccattttcat 420
atgagccctg gc 432
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<210> 144

<211> 458

<212> DNA

<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA852018

<220>  
<221> unsure  
<222> (1)..(458)  
<223> n = a or c or g or t

<400> 144  
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aaccccacct tttggctttt ctgatgaggc ttgaactcca ggggtgtggg cattgtgtgc 120  
tgagcatgag caaaaccctg agttacagct ccacattaaa gataaaaaca caaactccaa 180  
cctcaggaaa agggaatcac agcaatgtgg atgatgtatt gtgtggattt gaatttagca 240  
ccatttgaaa ataaggcaag attcttgact ccgagttttg catctgggtt ttgtgggaca 300  
cgtgcaggac tccatggctg gtcagcagct ctggcagact cctccacttc aagctgagta 360  
gtttttcttg ggacaatgac cttcacttat agcagacctc cctgnngggca tcagccatgg 420  
aggagcagat gtctggcttc tctgtncctt ggtacagc 458

<210> 145  
<211> 519  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA852027

<400> 145  
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ctgcagccca ggactgggca gtgggcgctt ctggtggcag ctggtggcag aggtattgag 180  
gtggcacata cagctttgtc tctacagaat agttccagta ggggtacagag tccaaatccg 240  
tgatgaggaa tataggatga cttggggaca aaggctgatg gtcctgccgg tggcccagct 300  
gggacaggct ctaaccagcg ctgccttgac tggtgccttg ggctgcagcc agctggcagg 360  
gtggaggggg ttctgagttc taccaacagt cgcgcagccc tcttcgcaga acaggtgtgg 420  
gactgcccct ccccggtctg gccttgaggaa ctctgcacat ggggcaactg cagatgaggt 480  
cccagagagg acggagctgc tgccgccaat cctgtgggg 519

<210> 146  
<211> 481  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA852038

<400> 146  
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agcgaagccc ccccttttgg cttgagactt ctgggtagct gcttgcacgt ctgtcgagca 180  
gaaaacaaaag tcatcgaaag tttgctctca cccaggcttg aggtgacgat tttggagcct 240  
gctacagtgt ggcttttcgg gtgaggtgag tcggcctaca ccgaggcaag gctgaagagg 300  
cacctctcca cacagctcac agaatcctcc cagacaccag gctgagcctc cagccgcttt 360  
tcagctttga agagaaccaa ctttaatccc acccaggcac atgcttttaa atttctcagc 420  
ccaaacttct attttcaaaa cgtaaaaaatg caggaaaacc tcaagtacag tcagacctta 480  
c 481

<210> 147  
<211> 453

<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA858448

<400> 147  
tttttttttt tttttttatt atataactaaa ttaaaacttt attggataaa gaacactctc 60  
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cagtttaacg tggaatgtca aacacattag tttctcattg tacaaaaact cttttctgta 180  
gctgacgcgc aagagggaac cacatgataa ctgcacattt caatcatctg tgatgagttt 240  
tgtttttggt ttttttttaa aaaagtcatt tgaagaaact ggtgtcttta gcatacagtt 300  
caaataaatt agttacatgt gcactggtga aacctccctc gcccttagt gtttcaaaca 360  
aagtcttagt gcaaacatcc aagttgctcg tcaatctaaa agactgttaa actcagaata 420  
caagttctga gttatgtgta gttaagtagg aca 453

<210> 148  
<211> 522  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA858548

<400> 148  
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ggttggtctg actacgccc gccactgagc tgctcaacc agccagggat ctatgaggct 180  
gacttctggt ttcattgatgt caccatatgt agtatgtatt ttgtctcaat aaagcatttg 240  
taccgatggc cctggagctt ggagggaagc taaaggaatg tgtagtgatt ctgagtaagg 300  
tgtggacctt cagggcagaa ctatctgggg gagggaaaaa caaaggcctt tcttcccggtg 360  
tcaggacagt cttgagtggc tgaactaagc acatgggcca ctggggctac actgtctgaa 420  
ctccgacagg tctgtctct ctaggagag cttgcagttg ggagttttag cagataagca 480  
ccgaaacagg tttccgattc cttcctgcag ctgttggtgc tc 522

<210> 149  
<211> 454  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA858573

<400> 149  
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aatctccagg atgtcactca aagccagaat tgactcttgc tctgcgttgg aggttcagga 180  
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agccaagtag ataatcattt cttcgtcgtt gggatcttgc catgtcccca aaaatcatca 300  
cagagtagcc cttttggaag gcgcagggtg agggatcacc agactctctt aggcattgag 360  
tttctgaac ggtgaactct aagttcatga ccagtgtgtc ttcattccagg acattaactc 420  
tcttcaggga gtcctgcgtc gcccgaaaca ggta 454

<210> 150  
<211> 472  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA858588

<400> 150  
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ctatgatccc caaaagtgtg cttgtgattt cagcaactta caaaggggag aggaaatact 180  
gagaaaggcc actatttaat aatgaaggag tgaagggtgc tctaaactgg gctccaaatc 240  
tccgtggtgg ttgtcattgt tacctccctt tgtatcatca agttgggtgc cttttctgag 300  
ccttatatct ggctctggag tcttgggtgca ccccaatcgg tgttcgggtg gctcgttcat 360  
gggataccaa agccttcctt acaaagtggg ctttctttct gtcccttctt cttggggagaa 420  
tggatttcta agggatgggt agttgaccct ctttccgacc caggcaatct gt 472

<210> 151  
<211> 354  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA858704

<400> 151  
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actgtacaca acctagtcgt gggacacata agccagttag gtgaatggag cagtctggcg 180  
cgcccccagg agccaggatt ccagccgagt tttgtcactg tgttcatcta agctgttttt 240  
ttccttttct tttttaaaat cttttttgtt ttttttagat ttagtttttt ttcatttttt 300  
gatacttggc acagtctggc tccaccgatg ggcattgagca gatccctcgt gccg 354

<210> 152  
<211> 526  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA858716

<400> 152  
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cagaattcgt ttcagtctgg tcccaggaa tgcttctcat gttaggattc acgtttcagt 180  
aacacgtatg cgcccatcac agccaaaaga gcgtacttga acttaggata gtcgttcatt 240  
ataatggatg ccatgccaac atatggtaag aaccctcgag ctcttcctac cacgtccttc 300  
ttctccagcc agttctggcc ttctttgtac aagcctcgat catcaacttc attagtatct 360  
cctttagtca gaaacttgat gtctccatta tctttttcat gaaccttgat tactctgtga 420  
actatcgga tgtctcttcc ttcaacttta aaaacaacta tttcaccagc tctgatggga 480  
tcctcccgga aatttgtgag gaacagcaga tctccctgt gaaagg 526

<210> 153  
<211> 539  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA858758

<220>  
<221> unsure

<222> (1)..(539)  
 <223> n = a or c or g or t

<400> 153  
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 aataatagaa attggaccag ttcttaagtt tcttcttcca tgtttcttgg aaaacagtgt 180  
 gtagtcaatt cttcttcac cgtggcttca ctgtggcacc ccatttccag tgattgatct 240  
 tctctccaaa caggtagagg ctggcactca ggatgtaact ggctgagaag aagagaataa 300  
 taccagcgg gctgagggag gcaaacacgg ggtacacca gtttccggtc tgaacgtagc 360  
 gccaaaggat cctgataatg taagcaaat tacaggcacc cagcangctg agtcctagct 420  
 tcttcgatgg atagttgtgt ggtctgagaa cggtttcagc cagggaaaag ggaaatatgg 480  
 aggtatgcat tgcgtgatta aacctgctg gaaagaaatc atccaagccc ttggggtaa 539

<210> 154  
 <211> 554  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA858760

<220>  
 <221> unsure  
 <222> (1)..(554)  
 <223> n = a or c or g or t

<400> 154  
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 acctgtgcac ggtgatgccg ggttattcgg cctggagaga agggttattt attttttttt 180  
 tttaaaaagg aggcataatat ttttacaact ttgtttctta aaataaaaatt agcagctctt 240  
 ccaaaaatat tttaaaatat aacaaaagag ttcgaataac tctgagggtta tgggaaactc 300  
 aaatccatgg acaatttggg tagctcaaca gaatatgggt ggcaggaact gctctattat 360  
 cagcactttg aagatcagca natttgaaaa tcttaaaata ccctttcaat tttttaaact 420  
 taagaataag tttgataaac ataaaaagac ctcaaataga tcaacagata aatgcaaaaa 480  
 ccaaaaatcc aaattcatgg agaagattca tcagagtatc attgctaaag ttattgaatg 540  
 actgaaaatc cttt 554

<210> 155  
 <211> 384  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA858852

<400> 155  
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 gaaatccagg caggttatga acaggactgg aactgcccc cctgacatct ccagggaagg 180  
 cttaatgcc cctccattat cttgtgcctc tgtgaaatct gtcagtgagg atcttgtact 240  
 tctgtgttac ttcacaaatc ctggcagcca ggcttatccc agagttgttg ctgctccaac 300  
 agttcggctc tccctcctgc ttccttgctg cttccatagc ttcagcagag gtgtctgcaa 360  
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<210> 156  
 <211> 467



<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA858910

<400> 156  
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tcaagacata catctgaaaa agccaccccc cattagaagg aatcactgcc aaatacttct 180  
ctgtacacac acttcaatga cacagtggct ttccccagaa cacagcattc acattaccga 240  
aagcagcaaa attcacttta aaaaacaaac aaacaaacaa aaaacaagaa acaaacgaca 300  
acaacaaaaac caacaacaga aaaaacgaaa cagaaaccag aagtgagaat cacaaaaata 360  
aataagtcag cacattcttg gtctgtctgg cctgagaaac agacatatcc atcatagtct 420  
ggttatcagg aacagcttca aggtcagggt ctctgagggt cccttga 467

<210> 157  
<211> 507  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA858926

<400> 157  
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ttgagcagga gccctgcccg gcgttggttg ggtctcctct cctgtggaga agctccaact 180  
tcagaagagt gtttgagcca tacagagatg atagggggaa atctccttgg tgatagaaaa 240  
taaccaaagc tcggaaccac ccgaaggcgc ttcacagttg ggatgtggga gattcatggc 300  
actgccattg cattctgaag caaacagcct taaactctg cagtgactgc taaactccac 360  
cttctggctg gagagaggtt tgcttagcat cctaaaagca atgccaaaaa gctctttctc 420  
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ccctggcgct acgtactggg ggacact 507

<210> 158  
<211> 511  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA858953

<400> 158  
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cctgctgagt gtgcgagcag cgcagacggc acccacggaa aaggcaggga tgacttagct 180  
gtctacggtg gctaagtga aagtcttttg gaacagattt actttttgtt actcaggaat 240  
tacatcaaag aggaaagccc taactgcccc cgttcttaa actaaaggct aagggggttg 300  
gaatcatttg ataaccacc atccaaatca cgttcattgc aaactgtaat ccaattcccc 360  
ttcattaagt tttccctgtc aaccataacc cctcaggatt atacacactg tatgagttca 420  
gaaaagatta atgtgaatgt aaggggtatg tattcgactc cagcatcttt gtcacatagc 480  
caatttcttt taaatgtctg ctataacaga t 511

<210> 159  
<211> 353  
<212> DNA  
<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859085

<400> 159

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tttttttttt tttttatcaa atactcttta attttattaa ctcttggaaa atattccaag 60
gaaataattg aaaatacaga aatattttgt tagtacaag acattacctc aactgtcctc 120
ttagtgaana ctgaatatgg tctgcgtgat ctattagggc aatagtaaaa ataaatgtct 180
gtgttacata agagctttgc ataaaaatcc ctgtattgtg tgtaatgtat gatatcgtgt 240
acgcgatgtg tgatataaaa gttagcaaaa tgaaaaataa aacagccttt gtggattagg 300
cagaaaaata tcaaaccga tgccttttcc ttatttcagt gacacgtggg aag 353
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<210> 160

<211> 376

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859130

<400> 160

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gtccttaaat aaagtgttca cagagtaaaa atcagaacta ccagtccttc cctccaacac 180
aacagagcac aggcacagaa ccgatagtcg atgagcccaa ggagtaagga ggaggctgga 240
gaggacagca gaggctaaaa gaaaaggaca aaactcagtc tcgggtccaa gggctcagaa 300
cagtcctaagt gggcagggtc cggttgactg ctagtcccgc ttggccttct tcttgtcact 360
gttgccattc tottca 376
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<210> 161

<211> 581

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859150

<400> 161

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ttgtgcatgg taacgatata cacacatgaa tcttgtttct cccgtgtttc aagacagaat 120
taattttaag ttttagtata gactaaagca tccaaaatac tgtggtacgt atgtagctac 180
gaacatacaa acacgttgat gcacagcgtc cgttctatct aaataggcag tcagcatctc 240
aattcataaa agaacacatg aggaggctgt atcattaccg atggcagaaa acgcaagacc 300
agcggctctgt acacaaaatg tgtgagacag atgtgtcaag gtggaatgta caaaatcttc 360
aaagaaacga caaggaaaca gacaaccctc attctcatag gcagcctcag aaggccgcag 420
tcaggaaatga taagaaagaa cgttagcaag ggacgcttcg ttgatagcca aacgccccat 480
gttgtaaagc aaaagcattg aggttaaagc tgtgttgctt ttgaaaagta atggaagtgc 540
cgtacattca ttggaacaag atagctgatt attagtctct t 581
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<210> 162

<211> 606

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859230

<400> 162

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tttttttttt tttttttaaa aataaaacca gagaagttta tctgaaaatt aatcaggcat 60
tttcaaatac tctttcacaa ctgagatttt attggtcgag gagtagagta cacagacatt 120
ccaattctta acacacgtac ccaaactctg aagagccgta gtgttcatgt accctaattc 180
tgaagagcct taatagtgtt cacgtaccca aacgaagagc tacatattgt ttttctgtga 240
acttattcca gtgatgtctc agcctcaaac ttggccagtt tccttacgac ctctcataac 300
aaccgaatgc tcacaatgct cagttccacc aattcacaat tttatgtcac acacagaaca 360
tactcaaaat caccatcttt cacagcacat tatcacaact gttaggaaaa tggactgcca 420
tgaccacaga catcacagtt ctgacagggc gaggaccaa gactggcttt cttacaaaat 480
ggttctacta gaaacacggg accagatata actgaaaata ttccagacac gaatgcatga 540
ctgagacccc aaattgccat ttagtatgct ttgtactgta ggatataaaa ctagccccct 600
ctacgg 606

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<210> 163

<211> 550

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859241

<400> 163

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cggcagcaaa gggttttttg cctttttttt caagttcaac aggtctttat tgaatgtcat 60
agttcaagag gcaaatctgg acacactggg atcagtgagc ttgaaacagg atcactgatg 120
cattgggtgat gataattcct agcaaatgtg attgattttt acttgatttc caagtagctc 180
tcaggcatct aacctgtgaa acagtgactg tttacataca gggatgcaag gggacataag 240
aatcagagca gaaaggaaac aacataaggt acttcacgaa aataatgttc caagaactga 300
aaagcctcga aggtgtacaa gaatccagta ataacaaact catgttcaag caggattaga 360
aacacagcgt taaaactgga ctcagtgccg tgtcttcacg tgcaaacctg ccaacactga 420
agaggatcat occattttcc tgtgactagt caatacatta cgaagttctt ttgcaaatca 480
ctctgctgac aagtaacaaa actgcactga aagcctttac tagtcctctt cccctccctt 540
tctcccgtgt 550

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<210> 164

<211> 563

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859327

<400> 164

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tccgaggaag cactacactg tgtataacag ggacatggca tcagaggtgt ggcagactcc 120
acagcagaca ccggcaagtg tccgtccctc tgcccactgt tcatgtgcac acagaacatg 180
aatgcgattt gaaatctggt cacggtgata aagttacaat ccgccagcca cctctgcagc 240
ctgacgtcta cccacatgtc tgaccgcga tgtctatgtc agcagtttcc ctcttgcaat 300
catttaaaat tcgtttcctg ttaggaacca gcaacatatt tttttttata tttatctcct 360
tttgaagtaa gagctatctc atctctgata actggctcat ttttgtcatt tatcaaaaac 420
taaagggtaa aggaagaaag tgtgatgaat taaaaaaatt atttttttta ggaaagataa 480
aattcatttt cacaaattta caagagctgc tgggtgcggga cttattccac tacgcatcaa 540
actgggaccc agtgcgagcc acc 563

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<210> 165

<211> 556

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859341

<400> 165

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aagacagatc atttttacag accaaagagt cccaccaaaag tgataaagga caccgggaaa 180
ggggcaggtc aagggggctg ggtccctccc ccggtgacac tgtgttggtt gtgatgagac 240
ttataaaaaa caaccacta ttagaactat gagaaacacg gagatagttt agcaccaccc 300
aggatcctgg agatatgtta gcacttacgt ggacccttac tgcattccat gtccttgtct 360
ccgtttctct gctgaggtgg ggaggggaga agctggggga aggactcctg ctgaccacgg 420
taagctggct ggggataagt ggacactagg aagtccctgt gatttaggtg agtcccgggtg 480
tcatttacct gcttggttctt accacatggc agcagcggcc actcacatct gccttagaag 540
ttacctgggt aactgg                                     556
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<210> 166

<211> 255

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859342

<400> 166

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ggcatgtggc atttcccacc ctactcgggc cttgatcttc taacttgctg tccttaaagc 120
tcttgcatg agttttggcc taaaatattt tttcaaaata aagtctaata agctgatccg 180
cgagtaagcc gctaagcata tccacaggtg agtcaatcac cctgagcaat taattgcaaa 240
ggggttcttg gcaca                                     255
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<210> 167

<211> 558

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859348

<400> 167

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aggagctggg tcagattttg acagagggta tgggaaggga aaggggagaa gaaatcgaca 180
tttattttat tattttattt aaatgtttac atttctttgt gttgttccaa gcctgaatag 240
aaacagatag cattaaagga ctctgttccc accccttctc tgtctctctc tccccactt 300
gtgctaactt aggataacac tctctatttc gttttgtttc taaagtgatt tgtggacttg 360
tgccgtgtga actgcattaa aaaggttctg ttttcaaaga tcgattgtcg ttccctgtggg 420
gacagtggct cctaagaaat ctgcattgta ggagaagaca atgaaagacc ctggccctgt 480
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ttacttgatt ttgaggaa                                     558
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<210> 168

<211> 515

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859350

<400> 168

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cacacacaca ctctctctct ctctctctct ctctctctct ctctctctct ctctcacaga 180
tacataacct acaagctctt gccagggtcag cctttcatct aagcaccatt ctcccacttg 240
ggctctctta ggacctgggc cccagagctc acatgtaaaa atttggtact aacataccat 300
aaccatgaa cagtagacct ctctgttctg tctctgtctt ttccattccc attaccact 360
aaggaaatgc aggaagcttg ggctcagtag ccttcaaaaa acacaaaaac aacgacaaaa 420
atcagaaaca gtgcccagct tccttactca gggatgtatc tgaggactca cgccacctcc 480
tgacttctgc ccaaaggga agcgttccaa atgag 515

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<210> 169

<211> 561

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859362

<400> 169

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tgtaacaaca ttaaagccat tccaacgtag atctatttct acggctcctt gcataatctca 120
ttgtagctga agttagatgt ttcagtaacg aaatgaaggt tatctcatca aaatgggtggc 180
acatctcaaaa gacgggtttc ttgttcctgt aactctctgc ctatccctca aaacctaaaa 240
ccccctacgg tccagagcta acaggaagac agccacattc ttcggggaag aagggaacagc 300
cgaagggggcg gggccgggag aaggacaagg aattggggca gaggagacct tcacttccac 360
tttctcagca ggaggaggtg gtttctgaga aacaggctta gagtcggcct ccctgcggat 420
cacttgaatg gggatgtgtc caggagggag atctgggtcca gctaggcctg gcttgctttc 480
tggtttgttt tcgggttggtg tgacaggggg aggctctcga tgggtcatgg gctgaggcct 540
gtcaaccact gtgtgcacac g 561

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<210> 170

<211> 548

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859536

<400> 170

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tattttccat tttccaatgg gtggtgtgtt ggtgtctgag acacagggtg aagaaactgg 180
agctgcaatg aaggcagact tttttatttt tcatttccac tgaccaataa acagaactac 240
aggtgcaccc aaccacggac atgcattaac tcgtcatgag aaatctaggt aggctaagta 300
tgatgagaga atgtttgtca ctccccaaaa tatctggaga ggaagaatgt agggttggca 360
ttgagatata atgtggacaa gctaagtggg ctccgtctga aagttggcat tcatccacaa 420
acgttaaaaa aataccaaaa taagaaaagg ctgtaaaatta ataaggaaac acagaaaata 480
ctgctttcat aaagatctga ttgccttggc actggccctg tgggcagaat caaacgcctc 540
cctcccca 548

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<210> 171

<211> 533

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859585

<220>  
 <221> unsure  
 <222> (1)..(533)  
 <223> n = a or c or g or t

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 aggggctggg tagaagagtc ctggagtttc ccataatcct tgcaggaaa cagcaatgct 180  
 ggcagataag gaggtggagt gaggcagggc ccttcaaaca acagggtggc gggccaaggg 240  
 gcttggggct cactctaaca tgcaaagtcc agctgcccc taaactaggt tgcttttgaa 300  
 gagcgacata cgtataaata cataagacac agctacacgc acacatgcgg agaaggctct 360  
 gcattcccaa gggtanggat ctaggcctac tggccccaag acaggagtca tcatgtgtct 420  
 gccaccaagt gattctctga aacactccag gtgggtggggc caggcaggta agtcttcgtt 480  
 gggatggctg cttggtctcc aagggtgctgc ccactaggca cccaagccac ttt 533

<210> 172  
 <211> 400  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA859633

<400> 172  
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 ctggggacag aagtgggcag ggtagggtga aaccacagag ggggatggag ggtgggaggg 180  
 tcagggtcct gctgtcaga gtagggccgc ctgctgctg cactctgctg tcagggtgggt 240  
 gggaatgatg aagggttggg ggtaaggagg atgggctcca cactgctcat tccccactg 300  
 tcatgtgtct gaagggcagg ctgcacaagg tggctgtcag tttgtctctg aggaagtctg 360  
 ctctcttggg gaaggacagg tgtcagcagt ctgaaggagg 400

<210> 173  
 <211> 545  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA859645

<400> 173  
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 tgaagttata catatgtaca catgcataca gaagccagag gtcattgaatg tcttcctcag 240  
 ttactctcta tcttattttt tgagacaggg tgtctaactg aatctagagc tcacagatgc 300  
 agcttctggc tggccagcaa gcccaggga tcttgatgtc tcctgcttcc cagtctggag 360  
 tggcaggcac acactgcatg tcccgttttt tatgacagtg ctgagagtgc aaatccagg 420  
 ccttggtgctt gggtagcaat cgctccatct actgagcatc tctccgacct ataaccacac 480  
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 agatt 545

<210> 174  
 <211> 283  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA859648

<400> 174  
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tctgcagctc tggaaaggct cctggctcag tccttgagga atgcaggcag ctatatggga 180  
agaacctgct ccaggatggg tctggatgag atggggatcc tatcaggga gatgacttca 240  
aattcgataa caaggtctcc acgtttctca ggtgttttgg gga 283

<210> 175  
<211> 483  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA859700

<220>  
<221> unsure  
<222> (1)..(483)  
<223> n = a or c or g or t

<400> 175  
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gtcattgaca gctacccct cataggaggc cccagccaaa gtcaggggca acctctgggc 180  
cgtcaggaat tgcagagctg agtctagttt ttgccagtgg cctagtgtat actgagggat 240  
acagtttttg tgtagatgga ccaagcaatg gcttggttgc tctttcagtc ctaactgtgt 300  
ggcagccgct tctgtgctg ctctgttgga tagctctgga gacaattcat ggccattggc 360  
tttcagcttc tgtaaccagt aacctccaa catcacagtc agtctgaggc ctgnggggtt 420  
cccatcctgc tcaggaaaag caaccgagtc atacacgatt cccaggacgg tcgggtcttc 480  
tga 483

<210> 176  
<211> 477  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA859722

<400> 176  
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agaagagggg caccagagaa ttcttttttt ttttcattta ataaatacaa atgaataaaa 120  
atactttgtt ttgtacagag accgcctctc ctctcttcct cccccgcttg cttgccagga 180  
agggctgagg atggcaacat gccctgtggc cgctctgcat gggcatctcc ccacacagac 240  
cgcttctcac agagagggtc tcatctcagt ggcctacaat actatttcgg tacaatcccc 300  
tcctcctgca cctaccaaca ccagactctt gcctttcaaa cagaccgact cccctgggag 360  
aaggaaagca caggccccca cagggtgccc cctggagccc catagctggg gactcgtgac 420  
accatgggac atgcacgctg gccactgaca tgtgggcacg ggacagaagc agacagt 477

<210> 177  
<211> 503  
<212> DNA  
<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859837

<400> 177

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atggaacgac ctgctttcca cccacataaa cctcctcaat gtttcgggtca tctcctagat 180
agaggaactt ctggataaca gcctcagaaa tatcaccacg gaaatcccca caaacagat 240
caatgggaga gtccgatgct ctgggggttga tcaagagggc atcaaaatcc ttgccgacct 300
caaagtttcc aatttcacga tcaagcccca gggcttggct tcctccaaga gtggctagtc 360
tgaagacttc tttgaggggtg aggcctttct cattcacctt attaattaag aggacgttgg 420
aaaccatcac tgctcttcgg atggcgtcaa gcatggaata ggagtaacca ccagccacat 480
ctgtcccaag ccctatcttc act 503
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<210> 178

<211> 534

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859933

<400> 178

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tagaagcaat gacaaaaata accacttaaa ataggggatt cttcccccca gtttcttgta 180
agcgttaagtc caggcattcc actcttccac tcagaaaaga aaaataaaaag gctttggagc 240
acaccaacct ttactcagat ggacaaaaca tctgcctcca gttctcacgt tagaccagga 300
cgcatatcca gagtggctgg tctccatcca gcccatgctt gctaaagcag ccgagtaaat 360
cccaaggtca gtcccaaccc caaccttcaa cagtatgaac tgcttacacc tcttatgaca 420
caagccatgc ttgggcggaa gggtcgggtc agacaccctt catctcccgt gggtgatca 480
caacagcagt catgtttgtg ttctcttccc tacagttcag tgtgcaaagc catt 534
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<210> 179

<211> 380

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859938

<400> 179

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tgttttgctt tctttttttt tttttttttt tttttttttt cttttttttg gtttgttttc 120
atttttataaa ctcaagctca gggaagcttg tttttgtcct ggaaaacaaa acaaagacta 180
aacaagctt tcatagtatt atttgcaaac ctgacctcat ttagaaagag atgtaattgc 240
atggctagaa cacagcttct agcatgaatg atgcaggtgt gactagtggg actaagagga 300
gacgatgcac tgttgacaag attataatct gctgggtggcg ttgctgaaaa aaaaaaaaaa 360
aaacctttgc cctcgtgccg 380
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<210> 180

<211> 425

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA859971

<400> 180



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tttttttttt ttttttttaca aggaagcaac tttattactc gttcttatta ctcatcccca 60
gtcagtttct cttcttgctc ttgccagtga ctttggacgg cgtgagggct ggagctgtag 120
cctgggtacag agtggaggat atcttggtga tgttatacag accaaccatg gagaagatga 180
atcaagtggg gacacagact ctgtggatga ggccatatgc gaagagtgcc aattcttatg 240
gaaacgcctt ttacagtcac cgctgatgtg ctcagcagat acagtcttga aggtccggag 300
gcctcttggg gtttctacat atcccacaat agccacaacc accatgggtg gggtttccac 360
aatggtcaca ggctcgacaa cttcgggtctt attcacctta gatcctggcc ggtcaacttc 420
ccgga 425

```

<210> 181  
 <211> 499  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA859980

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<400> 181
tttttttttt tttttttgca agggagggaa gagtttattt ggctttcaat tccagttaca 60
gttcatcatt ttggggaagt caaggtagac gtttgaagca agtaccatcc tgtctgggtca 120
agcagagaaa taaatgcact gaaggcgctt gctgctcact ttctaacaac ccagaggcac 180
acttggttga acggccaatc ttctgactag aatagctaga atacctacc caccacctca 240
gcttagaaga ggtcactgaa tccaatttcc attacaggat tggctctgat ttgatcaatg 300
ggaaaccaca agacaacaag caagcagggg tgtttgagcg aagagcctga agttcaaacc 360
agaagccaca tccccattcc ttgaatggat catattgggg gccgtgcata acggtgcatg 420
tctttaattc aagtactcag gaggcacaga aaggtggatc tctgggaatt gaagccaagc 480
tcatctacaa aacgatttt 499

```

<210> 182  
 <211> 591  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA859994

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<400> 182
tttttttttt tttttttaag aaaaaaagaa gtatggctta ttatgcattc ttcacgagg 60
gcattgaagt tgcattggact gataaaagtt gatgcaaaat gagaaagaaa caaaaaaaca 120
aaaacaaaaa aaaaaaaaca aaaaacaaaa aaaccagcaa aatgtttacc aaaaaactca 180
aacaatgag cagtgcctgt tcaatttcac agtctctgtt gagttcagtt gtaaataatgt 240
ttcaaatgac attttcttgg gaaaaaaaaa atctctacaa cattgtggaa tgtgagggggc 300
aactgtctcc cgggcatagg cgtctcaaag ctgcagtaga ttgcgccttg atcaggtgggt 360
taatttgtgc ttttatcacg gagaactttg agcatcctgg gaagaggtgc cccacactca 420
atgatatttc tctgagaaca actttttagt gactgtgttt ctttagatac atttagtaca 480
actgtagggt acgagtagtc agtgattgct tgctagctac acaccagggt tgatccattt 540
taaaactttt ggcattttgt cctcgtgggc cataaatata gaaccttgtg t 591

```

<210> 183  
 <211> 417  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA860010

<220>  
 <221> unsure

<222> (1)..(417)

<223> n = a or c or g or t

<400> 183

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tttttttttt tttttttgac agtagccatt tcagttttat tttgacattt cactcacatg 60
caagggggtg ggaggtgtag ataatccagc aagcatctcc ccatcaggaa attatgtctt 120
ggggccttga atacagaggg gaggtgcaga ctgcattcag tggagaaaagg ggaagcccag 180
ggggagctga aactgagtag ggtcttatga gaactggtag caaggagcct gggtaaggcc 240
tctggcaagc aggtccccta agtctgtcaa gatgctgtgt atggggttca gaaggacagc 300
accctaaaac agagaacaaa cttgccctac tttgcttcct accttggctc ctatatgcat 360
tcatgaccct gaatcccatt gctgttaacc tctgaggtct aattccttan ggactgg 417
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<210> 184

<211> 308

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA866240

<400> 184

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tttttttttt taaattttaa gggaaccttt attttaaccc aggaatgggt acacaatgac 60
acaaggggatc aaaaattggt atatgaaaa aataatacaa gtggatttgt gcaaaaaccc 120
caaaaactgc aagtgccttc gggatcttaa aacaaaattc aggatgggtg ataaagggaa 180
gggactgggt aaaaacctga aggggatttc aaaagggaac acattttaa ccaaaatgcc 240
cgatttattc aggaaggaat gaaccaaacc tggaaaatgg gtggcaaaaa ggcaaaacca 300
ttcaaaac 308
```

<210> 185

<211> 493

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA866276

<400> 185

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tttttttttt tttttttcat ctttatattg agattttttc tcttaaaaaa aagaacatta 60
tagatgtgag ggggtgggaaa ggatgactga cagcaggtgc tatagaaacc caaagctcca 120
gaaaattaaa aaaaaataaa atatatatat atacatttat atatatatat ataccaagta 180
atgcatgtga gtcccagaga agcagaaagc agcagcaaga agcaactagc acacaaggac 240
ctgggttcat gtacagcaca cacaagccat tccaatcctg ataaccacc ccaagcccag 300
ccccacccc caagaaaaga tgtttaagaa acttcctct taaatggggc tgcacaactg 360
gggtactgtg gcacatctgt aatctcagca cctggacggg ggagacgtta agataagggt 420
tcaatggaag ccttagcgac acaattaagt ttgagaccag cttgggctac attaagaaca 480
tctccaaagc tat 493
```

<210> 186

<211> 519

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA866426

<400> 186

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ttattttttt tttttttgga agtagaaata tttattcaga atataagaac gtttgtaaaa 60
tattataaat gtctctgtat aaataaatgg cgttttttt tttaaacaat tctatatcaa 120
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ataacacaaa ttagctatatt tacagcagct aaaaactaaa ggcactctgga aacattttaaa 180  
gctacaagtg aatctaaaaac tgacaaggta tagtacagtg tgtagtagcc acttttaaaat 240  
gacactttcc atacaagcag aacagtactg acagatgcag cagacagatg tgctttaaga 300  
acagtgcatt caagcaggat tttctaattc aagtgggtata aaaaacattt tcaattaata 360  
aaaaagttaa atttcatgca aagtaagtta atatgtctaa aagcaaatta gaaatagaag 420  
tgaacatttg tagttgttgc atcaggaagg taagtgtccc aacaggagca ctgcagaaga 480  
acgctgcgga ctctacagaa tcccttccac atctcaacc 519

<210> 187

<211> 301

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA866435

<400> 187

tatttttttt tttttttcca cctataatgt tttattgtta caggcagtgc tgatctctcc 60  
cacgtctggg atgacatcat gtggcatttg acactgctct gtgcccattg ctctcagggg 120  
ctacagtggg ttggatgtga ccagggaatg ctccccgtgt ctggggtagt accacgatta 180  
gagacatcgg aggcaagcac aaatcttcaa ctccagggaa atttattcgt ccagccatat 240  
gctgatactt ctgaattttg ggcacggacc ttcagttcct acttgctcgt catcttctcg 300  
a 301

<210> 188

<211> 534

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA866454

<220>

<221> unsure

<222> (1)..(534)

<223> n = a or c or g or t

<400> 188

tttttttttt tttttttccc agtgtgtgtc ctttattctc cccagaagcc atgttgactc 60  
ccttctgcag gctgatggaa ggaagggcgc tgcccttcat gtggactgtg ctgtggacgg 120  
atctgactga gaggagcccc agtaccagc agaatggagt tgagaagcca gggcgctcac 180  
taacagagca ggggacaagt ggcctcctta gaaggtgtgc atgttctggg tgttctgagg 240  
taacaggcct gtccacatgg cctgcatgtc cattgatggc ctcccaggct gctagtagaa 300  
gtgaggctgt tgctggcacg acgttactgc aagcagcaac agagtctcgc tatccacaaa 360  
gctgagcatg tctaccactt agacatgcag actccttgtg tcgcagagcc cctgggtcac 420  
cagcggaggt atcacctgnc gggcgcaggc atgcgatcgt gaccgttccc tccaacttag 480  
tcgaaacctc ccgctgccgt ggtgctaaaa aaaaaaaaaa aaaccctcgt gccg 534

<210> 189

<211> 504

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA874889

<400> 189

tttttttttt tttttttata gactaggaaa tataatttat ttcataaaaa ttaattttgt 60

tacaagagga atgctaaagg ttattttacaa gttgttttaca gaatgaacgg gtgggggctgg 120  
gactatcccc agtggatcag aacccacaga cacacagcca tgttcacagc ctgacatcca 180  
agctcccaca cccccgacct ctactagagt cccagaggag tgtgggaacc taaggggcct 240  
cgtggagcat cccaggataa aaggacactt aagcccagag aaagcgggta tgtgcctgaa 300  
gtcacacagc atagctacaa cttgggtccc gggcttccca tttctatgtg cgggctaaca 360  
gtgaccagca agagtatgcc cacggggatg agcatctttg gcaggaggag ctgaggacac 420  
tctatgaggc accattcacc tagatgccag gagcacctcg gtctcagtct tagagtccca 480  
cttcaggagc cactgcggaa accc 504

<210> 190

<211> 536

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA874928

<400> 190

tttttttttt tttttttgga aataaacaca acacttcctt tattatataa gtttggcaaa 60  
cagcacaaaa atccagcaac attttaaaaca tgtaaaaaag tcaaagtca aacagtactg 120  
agtatagttt gaaacattag aaagaatgag tgcagagtta ggattctgaa gctagcagag 180  
caaggcttgg tttctgaaca tgtacatgaa acacacatta aaacacaaca acataattta 240  
tctttacaaa acccacagcc aggcaatagg aaagcacatc agtggggaag gttctggccc 300  
acgtgtgttc actgagtctc acatatggaa gctacatcta ccctgaaata ccatgtgcac 360  
agggccaggc aggggaaccga ggctgctact gaagttaaca attatttgag aataataatg 420  
ctcaattaa tccttctgta tagcaatttc tattataata atgaatttat tccgctgcaa 480  
atctgagaag ctgagactta tttgttggca gtataaaatt tctgaccagt atcaaa 536

<210> 191

<211> 443

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA874941

<400> 191

tttttttttt tttgtattga aattaacctg attagattag aaaagcagct agtttgaaca 60  
aaggctctca ttatggatcat tcacagctca cttatggctg tgcccccgct ggccctgaca 120  
catgagttct tcttaccggg ctggtatgtg gagtgtgtta gttttgtgag gacctcacca 180  
gaaccttaaa gctcaggtgc gcttacagtc ttgtccatgg cctttgtgtt ctatttggtc 240  
gtaaacgtct gtctgttccg aataaagatt tgttcatgcg gcctctgctc tgaatgggca 300  
tctgctcctg tgtggtccga gcaggcttca tcaactgttc cctcaaggca tgttcttgtg 360  
tggcttgaat ttagtttttt tccatgtgaa gaaatatcac ctttggaccc aataaaaattc 420  
ataacagggt aaacctcgtg ccg 443

<210> 192

<211> 516

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA874999

<400> 192

tttttttttt tttttttata aagcaattcc aaagtttatt gccatagaaa aaactgattt 60  
ctcaaagtca attcttattc tctgtaaaat aatacacatg aacagaaatc actatacttt 120  
tgggtccaaga tatgttgggt ttttccttct tcttcagatg atggatagat gcagccaaaa 180

tctatgaacg cgtgtacttg ccccaaagt gcagcataaa cacagaagcg atgaacagaa 240  
gactcatcac cagtactggg acagggccaa ctttgagccc tggggaatct tctgtgtaga 300  
atgccacat cccccagtc cctgcagagg tgggtgcggcc tgcactccgg gttccgcagc 360  
tggcattttt tctctgccgg acagtggatc ccgccgcccg tgcggccact gctttgctag 420  
gagaacgccc agaggagccc acgttggtgg cactaggcgt tggaccggc atgctgatgt 480  
ctaagaacag taggcacaag agatatgaag atgaaa 516

<210> 193

<211> 580

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA875032

<400> 193

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aagtaggaaa gccacaaga caacaagaac ataaaacgag aacaaacccc gagggaaaat 120  
aagttttaat atgttcttcc ctccatagca gcaagctcta aacagctttc cttagtgtcaa 180  
atactgtagg cttgtgtcac acacagtaca cagaacaacg caacacacac caccacagat 240  
gcttctgagc agagatactc ctcaaaaatt taaaactata caaagatttt ttgagcacgt 300  
ggctctgcct ggagaattcg actagagaga ccctcctagg accatttcac cattactgta 360  
aaaacgggac aaaaggtccc cagaaaggaa attagaattc cccatggagc cataaaacct 420  
tgtacaactc gtttgccctcc aggggtctaag agcaaatttc actgcacgtc attgacatat 480  
cccaaatacg gatgcataaa gcttgagttt ctacgatata ccaaatacg atatatatac 540  
aactcccact gcaaaagaaa ccctgatacc tagtctttat 580

<210> 194

<211> 561

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA875041

<400> 194

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aaacataaaa gtagcagaaa tagtttacgg agccaacaaa gaacttcaaa aataaaacaa 120  
aacgaagcca tcaagagcaa agcaaaccag aaacagggaa gagaaaaata actatgtact 180  
tgggtcttcca aatgccagtc catccgaagc cagcctctac tgagggctcc agtggtcaag 240  
agggaaagca gtctccactg aggggcaactg tggcctgttc tatggcgtct gaggagaact 300  
caggtcctag ggaaatctct ggtccagcct ggctttccct tggacatctc tcttacctga 360  
gacacagccc aagctggagg ctggcttcag cttgctctta ggtccaggc actccagttc 420  
gtctctagtc cgccgtggcc gtcctcgaag ggtctggcca gaggcaaaact ccttctcatc 480  
gaaactgcgc ttagctttct gtagtgcagt ctcccgtctc agcagcttct gctccagctc 540  
ctgaatgggt cactcatccg t 561

<210> 195

<211> 549

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA875047

<400> 195

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aattcattga agatagagtt aaaaaaatcg tagaactgaa gaagaaagtc tgtggtgatt 120

cagataaagg atttgtcggtt attaatcaaa aggggattga ccccttctct ttagatgccc 180  
 tcgcgaaaga aggcacgtga gctctgcgca gagccaagag gagaaacatg gagaggctga 240  
 ctcttgcttg tgggtgggata gctctgaact cctttgatga cctgaatcct gactgttttg 300  
 gacatgcagg gcttgtctat gagtatacat tgggtgagga gaagttcacc tttattgaga 360  
 aatgtaacaa tccccgttct gtcactttac tgggttaaagg accaaacaag cacacgctga 420  
 ctacagattaa ggatgcaatc agagatggct tgaggggctgt caaaaatgct attgatgatg 480  
 gctgtgttgt cccgggtgca ggtgcagttg aagtggcact ggcagaggct ctgattaaat 540  
 acaagccca 549

<210> 196

<211> 547

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA875050

<400> 196

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 aaatgaatca cagtggaggc ctataccgga cccctcagg aactgtaagg actgggacgt 120  
 ggacactgaa ctgacaacac cgtcagcatc tggacatgcc caggcagctg tgctggcctc 180  
 acggcaccta ggccttgccc ccttgccctc caccattcat tccccaatgg gaagaccaga 240  
 agttaagtcc agaatagaag ggggagagggt ggaggatgct gctggctctg gtacctgccc 300  
 catgactcaa ggccaggcct actcccagggt ctctgtccct ctctctgca gggacctagc 360  
 aggaacacga ggaggggacc taggggaagggt gtggctggat ggcactctggc ttggagaagt 420  
 tggcagcctc agataaggca gctgctggag gaactgtcag gtgcagctgg gacctctccc 480  
 cccaagatga cagctgaatt ggcttcctgc tggcttggag ctcagcacct ctcactgggg 540  
 catacat 547

<210> 197

<211> 335

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA875097

<400> 197

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 gcatctcagc tgtgttcagc tacagtacaa agaacaatgg aatagcacca gggaatttct 120  
 aaaaagttca caagatccgt gacaccttcc tcttctgatc attcttctcg gctaaccaag 180  
 caaagaaagc agagccccca ctttccattc cttcagctac tgtcccacca gcggtctgat 240  
 tttcatccga acggccctca gagaataatc cgctcctctg aagggaaccc agaccactcc 300  
 gttctctatc tcatagggac tgttgttctt ggggt 335

<210> 198

<211> 569

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA875126

<400> 198

tttttttttt tttttttata tataaaatca catttatttg agactgggac tttcgaagcc 60  
 cagtctggcc tgatctagt tccagaagca ctgattagca gatgtgtttt cctctagctg 120  
 gctacaatgg ctgcggttca ttctattcag atgtcagaca ataggcacag ctgggttcct 180  
 tattcaaaat ctgaaggagt ctgggaggag gacaaacaca tagatagaat caagcttagg 240







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accattttgc gctttttttt tttgagggaa ggggggtgta tttatcatca gctagatgtg 240
ctcactgtat gctccattat ttatatgcaa ggcccgggtg actggaagtg cagttgtcag 300
gcattttaat aaactggaca gccatttggt tctgcacgac aaggcatctt tacacaggag 360
caatcaggag aaaacaggaa acagccaagc actctgcact gcaacacgcc accttaacag 420
ctaaccagca ttactcaact gctacacaac tgcgcctagt gcacaaaaat acataagaga 480
agagattaga attgtgtcgg gtaaacaatc ctttaaaaaa aaaataagtc ttttcacctg 540
aaaagtc 547
```

<210> 205  
<211> 404  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA875620

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<400> 205
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attgcaagcc attgtaagca gaaagacaga tacacttcag gcaaggtagg cttttattac 120
attggctaatt gctcatgttc aagtgaaggct ctgggttcagt ctgggctgcc acctgccatg 180
cctgtgatgt gggacagcca gcacccacgg ctttgcgcc tttcacgctc ggatagctgg 240
caacaaggca gtagtaaaaa ggagtccaac ttgtcagttt tgagtagcag ctaaggcctt 300
cccagcacag aggacaaagg gcttggtata caatgagatg atcatgacat tctagtcact 360
tgttaggaact ccaccttagt ctgggtccta agttagccca catc 404
```

<210> 206  
<211> 216  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA891032

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<400> 206
cccagcccca aagttttatt accaacgggg cacattogag ttcacacccc aggggggtaca 60
gcttaaaaaca cggacagtga cccgccccgc cccacggctt ccgtgaagag ttgcttgcca 120
aagcacagct tcttcaggg ggtccccagc agggcattgc ttagcccaaa ggttccgggg 180
gtcaagacaa taggtcagg cccccccg tttcca 216
```

<210> 207  
<211> 446  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA891041

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<400> 207
aaatagattc aataaaaagt caaacacaca cacaaacaca tcttaaaata gacttttagac 60
acgaagtgcg tgtttcttct ccacagtact gtgcagaggg ggagggcagg gggcgagggt 120
tcctccctag tatccccaca ggctgagtac caggcggcgg ggccagctcc gcccgacaa 180
cccccttctc ccctccctgt taaatacaca aatatattat attcaatatg aattcagttc 240
ctttccagaa aaaaaaaaca taaaaaatac gctggaaggg ggccatgtaa acctcgagggt 300
ggaaggactg ggcgcaggcg ggcaggccag agtccagtgt gtgagctgcg cccagacct 360
ctgggcgagt gcccatcgcc tgccccctc accccagtgg ggggcgggcg cccagccttc 420
aaggctgggg gtgtccgtat ggagca 446
```

<210> 208

<211> 412  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891068

<400> 208  
 gctctgaaaa cactttatta cacaaattac attcagattc tgaaaaatag tgttctaaca 60  
 gtgtaaccat ctaaaaaataa gacatcccgg aaacacacca actgaggaga aatttaaaaa 120  
 tgaattttaa tagagacttt ttaaaatttc tctcattgca atataatgtt agtgatttta 180  
 aaaaaataga aggagattta gcagcttttc gtcgtgtggc aggttggttc tcttactgct 240  
 cacaggctga gaatgctgaa caggaaaggc accaaagaaa gacactggcg atgggtgtgg 300  
 actgggagaa tactgtgttc aagcagagaa tagggctatt tacatccacc aactaaaacg 360  
 tctccaaatg tgaatgagct aaacttcctt cgggggttgg agcgctacct tg 412

<210> 209  
 <211> 513  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891108

<400> 209  
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 gtattaaaag aattaaacac ttttctaaaa atctttcaat gacaagttgg taccctttag 300  
 ctaactaaag ctaaaagggt ggaggtggga aaagggaatt aactagtatt ttgtaaccat 360  
 ttttaataat ttcttatttt ccaaactctg cttttataac agaagtgttt tacacttgca 420  
 cagtattaat tactttatta tacatggaag cctgtggtac gctgggtaca caatgagact 480  
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<210> 210  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891161

<220>  
 <221> unsure  
 <222> (1)..(474)  
 <223> n = a or c or g or t

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 cagttgtctt tccttatata ccatggcacc tangcagggt caagaaacac ggcacagcat 360  
 ttcatacaca aaatacagggt agccaacatt tgacttggtc agtttcagat ttgatcatcat 420  
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<210> 211  
 <211> 465  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891194

<400> 211  
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 gttttcataa atggtgtgaa aaagtattca tttatcaaca aggctgcagg tggccggctg 240  
 gctggctgac tttccaatcc caagtttttc taatataaag ctagttgtga actggagagt 300  
 aaagtggggt tcttgaagat gtttcttcac ttctgcccc aacaatattc ctctgtaact 360  
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 tttgtgcaga cgatatattc cagattcacc ttagcttggt atctg 465

<210> 212  
 <211> 627  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891221

<400> 212  
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 aacattttcc ttgttcaacg gttctaattt ttataagggt tttataagtc tcatagtcac 180  
 taagcagggt ctttttgaaa ggtaggcttc atgaccatt tgacttcgtg cttttacatg 240  
 acatgacaaa ttatttttatt caaattatgt tttccaaaag agagggttct gtgctagtcg 300  
 tctttgaaa ttttcatacc atttcagaac cacatttgct gggatgaaca tttccgatgg 360  
 atttggtgtc atctgggcct gagagagagc aaatgatgaa gcaaaattgt agaagttgtc 420  
 caacatcttc tgtgtgaact gtgtgaagga gtcaaccgag gacacagcgg cactgcctac 480  
 gggagtctgc tgagccaaac tgtccaaca ctccaccgag attccaatct gggcaacaga 540  
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 acctgatatt ttgaagatgg cacttgg 627

<210> 213  
 <211> 474  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891286

<400> 213  
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 tccttccatg ggggcggaac atttcacccc accaatagaa tcacaacatg attaggcggc 180  
 taccctacac tgtcgttctg atctcagaga ctggcagact taggagaaaa aaaaacaaaa 240  
 aataaataaa taaaactcaa cagtccactc ctttggttcc ctggtctttt ctctcttca 300  
 acacacggat gtggggcgga tctgagggag cctcgtgggg caaggtgggt gccgctggct 360  
 gaataccagg caaaccggtt ccctgaggtg gccccacaag gtactgggaa acgccactca 420  
 gtactgcagg tggagatggg cagaagggaa gacaagaaaa ctctgcccga attc 474

<210> 214

<211> 484  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891423

<220>  
 <221> unsure  
 <222> (1)..(484)  
 <223> n = a or c or g or t

<400> 214  
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 tccccgggctt ctgggtgtttt gtcctcggat ccagcagttc ccatgtggag gctgcatggc 180  
 ctctgtcctt aacattgatg ccgtgggtca tgaggctctg gcggagtgcg tcacatgcct 240  
 ccagcaaggg ctgcctctcc tggagctgct gtttcggggc ctccccgggtg gccccaggcg 300  
 tggccagtgc atactggcgg accttaagcc tgaagcgcac tagttcatct accacacagt 360  
 gcanggctac tgtgtgtctg tctcctgaaa cacactgtcg cttggccaga gaaatccaac 420  
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 gccca 484

<210> 215  
 <211> 614  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891553

<400> 215  
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 tcctcttcct cctcatctcc ttcgtctctc tcagagctga aggtgccatc aggcaagctg 180  
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 atttggtctg caaactcatt gggcttaaac tgctgggtgc ccaggatgac gtggcgcgag 360  
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 aaagcacagc acgtccatcg cgccaacttg tagctgttgt tcttcaactc agtggcgatg 480  
 acagccccac gctgagagtc cagcttctga cgccagtcaa cgccattaca atgcctggag 540  
 tcccattcat tgagtgtctt gatgttgatg aaggacactt ccccgttggc cccagtcattg 600  
 acgccatcat gttc 614

<210> 216  
 <211> 493  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891694

<400> 216  
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 ttcttggttaa tcgtattctc catttcaggt gtgattaact tcaagatggg ttacaggtac 180  
 tataaacttt tattttgttg tcttccattt gttccgagtc aacaaaactct gtgaaataca 240  
 taaaatacag ccgcaacaca gaccagttac tgtactcaca taaaaatgat ctgaacatca 300

cgtaaggaca caagtttcag aaaaggagta cttcaacact acttcaacaa cgacgatagt 360  
 tttttcataa ttatgtataa atacattagt atccaaaggg cgaatctctg tactatttct 420  
 agataagaat gtcctcaa atgtgtaactga attacaaatt atagtcttac atatgctttt 480  
 aaagtaatca agt 493

<210> 217  
 <211> 516  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891735

<400> 217  
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 gcttagtcac actcaggtga ggggtgacagc tcctcctgga ttttgtttcc atttattaaa 180  
 aaaaaaaaga aaagaaagaa agaaaaagcc acccctcac tcccagccca ttctcacag 240  
 ccaggggtcag aaagcagcat cagtggggcg ggttcctcac ctctgggttat ctctggccca 300  
 ggtcagcttg agccacctgc cctcaccagg agaggggttc agttggcagt taggcttggg 360  
 gaagtctcta cctggacccc ccagaggcct gggagcacc cctcctccc aggaaaggga 420  
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 cccatctcga ggacggcagg aagtttattg caccag 516

<210> 218  
 <211> 593  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891738

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 ttaatcccc gattctggag actaaggcag gcagtttggt ctacaaagt agttccagga 180  
 cagccagggc tacacagaga aaccctgtct tgaaggga aaaaaacaaga tgatgaagaa 240  
 gaaaaagaaa taacgtacag tttttacaca ttccatacat cacacacata tctgaagaat 300  
 ctaagcaatg caaaacaagg cctgagggga ggcagtagaa gtaaagggtat ggtagggtaa 360  
 gaaagtgatg tcttcagagc tgctttctcc cctcagtaga ggaaggaaac gtttatctat 420  
 ggcaccgagg attaaggctg ggttggtaaa gaggtgtagg ggtcctttgg gtacaaactg 480  
 ctgttccatg ctttcattga accacctgaa cgtggacacg gtgccaggca ttgctgagca 540  
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<210> 219  
 <211> 599  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891739

<400> 219  
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 tgcgattgca cagcgcggcg tacggattga gcagcaccaa ctggcgccgt gcgaacgagc 180  
 tgcccagtct cgccgcctgc tcgaagtctc tgcgggcatc gtcgtcccga ccctgaaatc 240  
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acgtcaccgc gcgctccaag tcctctaggg cgctgctac atccccctgg agccgcctcg 360  
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 gggccttgga ttgctccaac tgtgcttgag ggaaaactcc atcttcatct cctcctctg 540  
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<210> 220  
 <211> 511  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891740

<220>  
 <221> unsure  
 <222> (1)..(511)  
 <223> n = a or c or g or t

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 atgacatcat catcctcctg agtttccacc cccttggtct gaggcggat gacatcatca 240  
 tctttgtcct gctctgggac cgtagggaca gcagcctgag aatctgcgat ccaagcctgg 300  
 aagttcccat gatgtttctc gaagaggcca gggaaggagc cgcgggggtc ggggacacca 360  
 ggcagcaggg cttccttcac cctgcgcac cgcagcaggg ccaggagcag caccaggggtg 420  
 agcagggcca ccggaggcca caggccaggg cgagaggtgg ggtgggggtc ccgggggtcc 480  
 tcgggagggt ggggccagt cangagcctg t 511

<210> 221  
 <211> 555  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891774

<400> 221  
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 gggaaaagaa aaacggggag gttgaaaagc agagaggtgc accttccctt ctgaggaagc 180  
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 tctggcaaat gaatctctta aaaggctccc tccttcgttc gggggaacag cacatgtacc 360  
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 cctgtgctgc tcccaaggga gaggttctgt ttgggtgtgg gataaatcta aacaagcata 480  
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 gcagctcaag agggg 555

<210> 222  
 <211> 636  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891789

<400> 222

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tcaaatacaa aaaccaggaa acaaatcacc atccttcaac aatttgagca aagatagaat 180
gaatgcctaa ggaacaacaa agatggactt gcagaggatg ggctgtttac agacgtcaag 240
caccataaaa aaaaaaaaaa aagcacaaat gcgtgggtt ccaggtatat acagtaagtt 300
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aatgaggaaa ggagctgggc actcctttta ttttctgtct acaacagaac aggaaacaaa 540
ctgaaacata agccctgttt tacatcgaca gttttaaaga acatcaatta tacaatgaga 600
gggactaaac agaagtgttt acagatacca gacaat 636

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<210> 223

<211> 609

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA891790

<400> 223

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aaaaagcaat tttggtaggg cagagatggg gtagagtagc accatttgcc atgtggtaag 180
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<210> 224

<211> 591

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA891842

<400> 224

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tgacaactga gcatcagagg acaggttgat aaatgagaga gcgtagttgc aaatttatcg 180
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gatgaagatc gagttctttg gcggcccgag tgtcaagcca ctgaaacagc aagtcctggg 480
gacttaagga ttctattctc cagcccagag cttagcagca ttaacgggag cacaagttac 540
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<210> 225

<211> 614

<212> DNA

<213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891872

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 ttaaaaatac aacttattcc ttttaagtta ttacttaaac tatctagatc ttctacatat 180  
 taaaatagaa gtgagaaaat agatctttgg aatctagagt ctagagtga ggctaaaaaac 240  
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 gagttgatca aagtttcaaa atttgtcaca tttgggtggaa aaataaaaaca ctaaattgcat 360  
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 aacattcaac ttctgagctc atttctagct cccgaaaggg gggtgcacaaa tccaatggga 480  
 ttgcatctac agtgaggccg ctctctcact gctgacaaaa tactctgctt tttggcaatg 540  
 gcaatgataa acaagtagat gatgagaact cccgatgctt tttgagaatc aagggttgct 600  
 gatcttgaaa atct 614

<210> 226  
 <211> 480  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891884

<400> 226  
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 tgactgggag ccacagcctt caaaagggtga agctagggtt gctgtgtgtg gagtccctagg 360  
 ccatcctggg ctacatgggt tcaggccagt tgacacagt agaccagct ttacacaaca 420  
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<210> 227  
 <211> 605  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA891944

<400> 227  
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 cctgtttctc cagccaggct aacagtgaaga tcacagtcag tttcctgagt gctggggcca 240  
 ggtagagtc cctgtaacca acacatacaa ccttagaaga gctttaagaa aacacgcttg 300  
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 ttagcagaac ttgggttcacc cccaatccca ctgccgtgag acttctcagt tcaacctatc 540  
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 gtacc 605

<210> 228



<211> 542  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA891950

<400> 228  
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cctcagtggtc ttggcataga ttggctccag cacatgatga gtaagaagca ggaagaggcc 480  
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<210> 229  
<211> 216  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA891965

<400> 229  
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aaagagctgg tagagcagca ggcgtttgtc gaaccctgga gcctttggga tcttctgatg 180  
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<210> 230  
<211> 487  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA892027

<220>  
<221> unsure  
<222> (1)..(487)  
<223> n = a or c or g or t

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caaatacaca tgtcaatata tatttcataa actactaaaa aataaaaccc tttatcctct 180  
gaggttattg atgtgtccta ggtctccaac acatctcatt aaacagtaag ttctattcat 240  
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catggatcat gctatctcaa tcaaaaccac ttcctctaca cggagtcctt tagaaaatta 420  
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ccttttg 487

<210> 231

<211> 433  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892112

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 ggcgcctgca gcacactcct gttctcctgg gctcttcgga tcaggtagga tatcacctct 180  
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 cccagctccc acatgctgca gaaaggggtca cattgtcaat ccagagagtg gctacagcgc 360  
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 cgtggttgga cac 433

<210> 232  
 <211> 443  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892128

<220>  
 <221> unsure  
 <222> (1) .. (443)  
 <223> n = a or c or g or t

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 aaatacagtg ccaaggtcct gaggccactt tgcaagaatc ttcttcacat tcacggaaag 180  
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 cattcatagg cagaagaatt tta 443

<210> 233  
 <211> 439  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892146

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 gagaccacc cttggagcct gggggcagac ctggagcact ccctacctc aggggtatga 240  
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 atacagcatt tagtcacac 439

<210> 234  
 <211> 632  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892234

<400> 234  
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 gcgactgaga ggtgaaaggc ctcccgttcc tcagtggcag gatctggacc cactgcctag 180  
 gccgggttta atccagccga gatgctggaa agcagagcac acagttgtgc ccatcagggc 240  
 aaagagggca agagagctca cagctcctcg ataccgcttg ctagggtctc ccgtgtagta 300  
 gccatatgcg taaagaactc gccaataat ccacgccacg cccaggccag aagctatgcg 360  
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 gttctggtgg ggcgctgaa tgcagttgaa catatgcccc ttctcaggat ctgtgctgta 480  
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 gacagccatc ttggctctgg ctcaccttga cg 632

<210> 235  
 <211> 637  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892251

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 ataaaacaca cacaaaaaat tcagccacaa aatataaagt cagtatgctt gcgaaccggg 180  
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 ctgcctatcc cacataaaca catctgctct tacgatctct agctggacac aaaagtccct 360  
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 tttggaagat ttgggcgagt ccttcacat cccagtgcgt ttcgttgggc tccggttggt 480  
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<210> 236  
 <211> 606  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892345

<400> 236  
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 tgaagtgcag tcttggctat ctttatcctg gaaggagcag gatgccagag cagttctgcc 360  
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 ccttgt 606

<210> 237  
 <211> 719  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892373

<220>  
 <221> unsure  
 <222> (1)..(719)  
 <223> n = a or c or g or t

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 aactgagatg actagggaaa cattctaaac ccaccccaac cttagctaaag ttacataatg 180  
 ttaggactca agtgccaaat tagatattac ccacttaatc tacgagtga aaagagactc 240  
 caaaatttat cctatttagt ataacaactt ttacatgaaa tatatagcaa tttgtatctc 300  
 agaaagcaat acggcaactc ttaggcgttt cctttatgca gtgactagaa aatcttggtta 360  
 cagctaggca gctctgcgac accagtaagc tgctcagggc tagcatagaa cagcttgata 420  
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 atgcttactg tagttaaggc gacaactgaa gcacattaag tgaaggtagt tagaatttag 540  
 tgacaatcat tagtctcttg ccacctacac agaactgtat aatgcttttg tggaatggaa 600  
 gtgttgatta actggaattt tacacactca cacacaaact taanaagtaa cgatcaaagg 660  
 caatcatcct acagggtacta tgctgatgta ctacaatcca catatgccac agaactgaa 719

<210> 238  
 <211> 591  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892395

<220>  
 <221> unsure  
 <222> (1)..(591)  
 <223> n = a or c or g or t

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 ccatgtaaag cccgttcttc tcttgatggt atgttctgga acacggggaa ctggagggtgt 180  
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 ccagggtgta ctgaagcctt tcaggtctcc aaccaaataa tttaggacaa ctggagcctg 360  
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 agcgctgac gagcccggtg gaacatactg tccttgggct gcctggcagt tggccacagc 480  
 ccgcttcctg aaagcttcct gngttgcctt ctgtttgca gccttgccgc cccaagcagc 540  
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<210> 239

<211> 498  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892425

<220>  
 <221> unsure  
 <222> (1)..(498)  
 <223> n = a or c or g or t

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 ccctttatct caagtctt 498

<210> 240  
 <211> 583  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892506

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 gaacagtctc ctccagcctg tccaggcgct cttgaagctt ttgcactatg gcgttgagat 180  
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<210> 241  
 <211> 547  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892520

<400> 241  
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 caacagagct ctgggaaggc aggagcctcc tagatagcaa agggaatgtg cttggagttt 360

cacttcgggtc ccagaatgag acccagcagt gtctcccaga actcgggctg atccagttata 420  
 ctgcctcttc attctccacc actgacagag ataggccagg cccagacca cagtaaaaac 480  
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 tttggca 547

<210> 242  
 <211> 524  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892553

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 catgtgaatg tgatggcccc ttcccgggag ctctcactga acct 524

<210> 243  
 <211> 465  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892561

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 ctttttacgg gaaaggtaaa tggctccttt gttaaactctg ggcagtcgac cacagagacc 240  
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<210> 244  
 <211> 658  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA892598

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 catcaccatc ctggttggtct tctgtctgtt ttggtgactc ttcggggatg tccctttctt 360  
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<210> 245

<211> 476

<212> DNA

<213> Rattus norvegicus

<220>

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<210> 246

<211> 487

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA892666

<400> 246

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tcagccatct ctgcagctcc ggagaagaag gctctgacag gacagggccc aaaaccctgc 180  
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<210> 247

<211> 503

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA892821

<400> 247

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<210> 248

<211> 644

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA892851

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<210> 249

<211> 515

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA892861

<400> 249

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<210> 250

<211> 533

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA892888

<220>

<221> unsure

<222> (1)..(533)

<223> n = a or c or g or t

<400> 250

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tttacctgac cctccttan aagtactggg gtgggttctg gctgcacatg gggagatcag 480
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<210> 251

<211> 541

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA892916

<400> 251

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cattagcaca aacattacat caacagttcg ctaatcacat ctgtgggtct aaaggaatca 120
ggccgtaaaa gggcatctct aaaacacccc tgggcagggtc caaactcgct gggtcaccca 180
attacagtgg agaaggcagt cacagaaaga aacccaatga aatcctcctg gccactaaat 240
gggagtcttg aaaaccctct ggcatagaaga gacttgtaga gagtgggaga acaccctttt 300
actatggagg aaaaccagga gtccagggtat tctcacacat ctgacatggc ccttgagaac 360
aagtttcagc ttgcataatc cctgcatcaa cacatgcatt accactaaaa ggagtcctcg 420
tgggtcctac ccggatgccc aggggtctcc cacaggtagg ttcacatctt cgggttttgc 480
aaggggccga accaaaccgg gcgatgggtct ctatttctcc attctccagt tttaacaactc 540
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<210> 252

<211> 603

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA892918

<400> 252

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aactattagt aaaaaaatac acttttagggc acagcattgt atcacaaatt ttacagaagg 180
gatactttgc aagaatttaa tcaaaactaga gtaactgtat cttttaaatg cagcacttaa 240
aaatgtaaca actctgtgca ttctttttct taaaaaaatg accttatatg tgtagaaatg 300
ctgctttatt gctgcagagg tcaaagttca aggtcaaga ggtacaggag agaatacaaa 360
ggtagcctta gaaactcggg tctgtttatg tataaaaagg taaagtattt aaaagttaat 420
ttacaaacca agaacaaaag tggatgcac gcattatgta catgcgtcct gaacacatca 480
aacatctcag atgcatagcc caaagaacag aagaccacca accactctcc cttgtcaaaa 540
aaaaatattt taagtcacac cattaatttc ttccagggtga ttacacatt tccgaaacca 600
tca
603

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<210> 253

<211> 441

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA892950

<400> 253  
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acgccaggta cttgaccagg aagtctctca gcctggatat gtgcacatc tccttcatcg 180  
tggtgtctcg gcttcgaagc tggatcagcc cactttccaa ggtggtttca gtgattagaa 240  
ccgtgaagag gatactcatc tcatcgtact ttgaatagag ttgctctaata gaggactgtg 300  
cagtttccaa ataaccaggc cacacagcaa tcccattttc tagtaactca ttgagtagcc 360  
cttggcaaac ctgtcggagt tccacgggtg ggccctttccc cacatctaga gccaccttaa 420  
taggggctaa acaagggtga a 441

<210> 254  
<211> 496  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA892993

<400> 254  
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ggcgtggggg aaggggctgt tggactaccc caccctacc ccggcgctgc ttggttagcg 120  
cctgccagtg ggggtccagt gctgtatggt gagtggccta gggtcctgct cttcatcagg 180  
ggtggcggtg gggatatctga gtccggaggc catggttctt ctggttctga cccactgtac 240  
tgtgaccctc cctgtgaggc aggcaggctt tccgggctct gcaacctggg ttgggggttcg 300  
aggttaaagg gatgcagttg agatttcatt tgaggggggt ctggagacc caaggtgcag 360  
cttcttctct agcgggtgtg gaggggctgc tccgggtcca agaggcctgt cacaggtgct 420  
cgctgtggga cagagggggg gatgaagacc tcgagctgag ccatactctc tcttcaccgc 480  
ttcctccctt cctgca 496

<210> 255  
<211> 482  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA893000

<400> 255  
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aaactgaaat ctttaattta caggactata aatgatgcca cttaactgag aaccagccag 120  
caaacagtag catctgaaga ccaccactcc tggaggggtc cccacaccaa gtcagcctag 180  
tagtgactac agtagattag gagctaggag tcagaagaac aatgcttgag gttataccaa 240  
cggggggttc cttactcctt tgccagctgc acattggtag gctttgctcc aatggggatc 300  
ccatatttgt gcaaagtgtt catcaaaatc tccctcatgt cgttgttgta ggaatcaaag 360  
tcaaatacat tccgaaccac actggagagg ccttcagtag ggaatttctc taagtgtttg 420  
acaatgttga caacttctct ggtagaataa ggatagttga taatcccttg gtcagccaat 480  
tt 482

<210> 256  
<211> 367  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA893032

<400> 256  
acagtgacaa gaaggcttac aaaggagaag gaagaagaac acattggaca cctgagattg 60

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ggtctcaggg tttgttagct tgccctattg cttcttagc cagcagttct gagcaactct 180
caagctttgt taccatctga ggtgcattct cttctgtgt acttctattt ctaactcatt 240
gttatgtgtg tactctctgg tctcccatgt agagtactca ggaggatttt cttgatcttt 300
ccgtctccatt gagaacatct ttaattgtat gaaacatcgc aggttgtctt tatctacaga 360
gtaaagg                                           367

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<210> 257

<211> 424

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA893080

<400> 257

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ctcaagatga cagaaccctt tgcagataaa attaaaattg aatctgagtg agaaatgacc 180
ggatttccca ctttgcaaaa gatcaggcag cagcctcccg gcagccatcc ctgtgtagaa 240
gacagggtga gctgtgacct ctgggaacaa ggcatgagac ctcgtctggg gaccatcagg 300
ccaggagggc aggtgggcag tggcaggctg agggcagagg agaagggcag ggcagcatgg 360
gggaggggtg ttgtctgtac gtgcacacgg gaggccatgg gtggagacga aatcaacttc 420
ctat                                           424

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<210> 258

<211> 479

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA893082

<220>

<221> unsure

<222> (1)..(479)

<223> n = a or c or g or t

<400> 258

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tttttttttaa gttacagaaa atccagttct gcaccacaat acaactgtaa aaaatctgca 120
tcaccttaaa actgtgcagt aatgccattt tataactgca taaattttat tagcgttcta 180
aacagttttg cgattttttt tttgtattat atgcttgag gttatatctt agtgcaattc 240
agtcccaaat actttaattt tggaaaaaaa acatacagtt tgaatgtaaa atacccttac 300
agatataagc aggggcggtt ccccttttta atacttttgt tttcaatata gtccacggta 360
tagcaagaac tacacatacc caacttatat ttaagttgca agcacatgct tcagaagcta 420
cttttaaaac agtcnccttg caaactctac cccctttaac atcacaacag taaacgatt 479

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<210> 259

<211> 413

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA893189

<400> 259

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tgctaactag tgtaaatatt atcacatgaa aaccaacccc ggattaacaa aacaacctta 60

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tgattagaca cttaagacct cgattttttg cttactaga aatttacacc accagaagtt 120  
 cctgattaaa atacagaaat ctataaagct ggcgcaggac gttaaactga ttgggttcctc 180  
 ccagaggccc actggtcgga ccgctagcca cgagtcccgg ggctctcagc gcagtgtgac 240  
 cagctcttct gaagaggtag gatgaatggc gaccgtattg tcgaagtcgg ccttggtggc 300  
 cccatttttc actgctacag cgaagccctg aagcatctca tcgcagccaa tcccctgcat 360  
 atggatgcca accaccttct cctctttgtt ggcacaaaacc atcttcatca cgc 413

<210> 260

<211> 643

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA893242

<400> 260

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 gaaaaattaa gagatgattt tttctttctc ttgaaagttt aagagagatt ctcaagtcat 180  
 cttttcatga ctggaacttt ctaagacaaa ccacaaagcc atataccaag cagaaatcag 240  
 agaacgaagc ccagtcccca tcagctgcag gtggaaacca cggagaagcc agcacagcaa 300  
 gtggctcatg gttaatacct caggctctgt ctgagaaaag atgccgatga actgctctga 360  
 gcaaggtttg aaacccttct ggatcagcgc cgagcctatg cactcagcca tttctgcaac 420  
 ctgtttgtaa gaaatccact catatggctg gtttggtttt ctagaacctt aacaagggcc 480  
 atcatttgac acctgaatcc ccctctggaa gccatcgta atcgttctga catcgctcga 540  
 gtagtacagc aagagcttgt cgtcctcaag gactgctgat cttcggacac cctcagtagt 600  
 acccgttact ttcacagact gcatggacag atcacatggg ggc 643

<210> 261

<211> 540

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA893246

<400> 261

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 tgccaagggt tacaagtggg taggaaggaa ggctgctcag catttgccctg agaccatgaa 180  
 tgtttatagt aagtatttcc taaagtttta aacacatcag tcaaactagt gtaaattagga 240  
 tggtatgact ctttactcgg ggagattctg taagtgtcgg gtgggtttta caaatctcag 300  
 gttgctgaat tatgatgcag gaaaaatggg ctacacagc attctgataa atcttacagc 360  
 cagatgaact cttctgcca aataaatacc cgcacatacc gaacctgcac actgagttta 420  
 atgatgctca gcctgaaggg agcagcgggc agctactcga acagcaggtc ctgcctcttc 480  
 tcttcgcgca ggaggttggc gggctccatc aactctccag ctgctctccg ccgctccaag 540

<210> 262

<211> 512

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA893436

<400> 262

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gaaaccgaag gcaacacatg acagggtcac tacatttcat caatttatac acagaaataa 120  
 aaatccagct accaagaggt cctctcccag agtgccggtc gcctccgcga cattctcccc 180  
 tctccctcag cattcgaacc ctcttactaa gagaggtagc ttgtgcccag gctctattcc 240  
 agtagagctg gagaatttat gacacactaa aggaagccac cagaccgggc ttccgggcaa 300  
 cccactttctg tcccgttctt ccttttctct tgcttagaac acaaaagtga ccagcaggcc 360  
 actttgtggt ctgtaaccc aatattcaaa gccatcgtgc ttctgatctg aagtgttttc 420  
 tgaaggttgt ggtgttcagc tgataaggcc ttctgtaact gattggatca ctatgcaatg 480  
 aaggaagggc tcaggcttcc tcagcaagtt aa 512

<210> 263

<211> 466

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA893453

<400> 263

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 tagtgacagt ggacagtagc catttgtatt ctgaatgcaa agattcctgt caatatgaaa 120  
 agttcgggtc gatgttaaac aaactacaaa aggtttgaac aggtcgtcga caaaaggat 180  
 ttaggttatt agttaccatg tgaaatatat tcattgtcgt aacacaccag agaaatagaa 240  
 taaaaatggg ggacagtatc actttacacc tacgagaatg gctaaagtca aaagaatcga 300  
 catgcccgtc cctgcccccc gcagatgtac aatgtttaca cctgacacac acagggtcacc 360  
 agagtctggc ttcttttcat cgaatataaa tacctgcttt cccaccacc aacaaccaac 420  
 cagcaaatca gtgcccgtat ctacttaaaag aaagttaatg ggtgct 466

<210> 264

<211> 410

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA893454

<400> 264

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 tcagtgggca aagtatactt tagacacagg gaagggtgggt acaccccacc actgacagac 120  
 ttagaagatg catttggtta cagcatggat gatctctggt gtgacatttt ctgacgtctc 180  
 cataagacac tccccatgag tttctattta attcgcttct aagaaacttt ggaaatttca 240  
 aaataagtgg atggtcaaga ataaaaaaat atgatctttt ttaagctgtg tgtataatgt 300  
 gcctggtaag ttagagggaa atgagttttg gaaagcaggg tttatgtggt ataaaaatac 360  
 tgttcattta cctaagactg ataataaatt ttatggttga ataaaactta 410

<210> 265

<211> 434

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA893485

<400> 265

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 tagtcatgct tgtcaggatc tttctggaag gacatggcca agcatgagag ggtggggggc 180  
 atccatgcag tcattctagg ttagttgagg agtaggaaat tgagagtact tctcgttttg 240  
 atgcgaaggc ttctcaaadc atgaagatca ttacaaggac ggccgtaagt gagatgaatg 300

agcctataga ggagactgta tttcatgtgg tgtaagcatc tggataatca gagtaacgac 360  
gaggtatccc cgctaatacct aggaagtgtt gagggaaaaa tgttatgttt acacctacaa 420  
atataatggc aaag 434

<210> 266  
<211> 656  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA893495

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ggagaccctg agaagactgg ggaaaggctt ccatccctca aagtcagatg gcaccaaggc 180  
ttctcaggac acgttcttag gctggattga ccaattggct catcatcagg ctgctccatg 240  
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agcgcaggtg taggggagcc cgttggttag aattaggcaa cacattccct tcatccagtt 360  
gtagcatggc cttgtggacc atcgttaatg tcaagggaa accttttggtg ttgcctgaga 420  
aatctgattg gttgtgagc aagtccttaa tggtcaggtc ttccagcacg tctttaagg 480  
cataggtatc agacatggag aatttcggga tgtatagggt cacctgcctt ggggtcataa 540  
gcttgcccca cctatcaatt gtgtcccgac taagtgcagc gatgacagtg tccatctggc 600  
cctggtccgg aagaatgaag aaggcagttc catttccac atagtccatc tgtatc 656

<210> 267  
<211> 630  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA893552

<400> 267  
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agccatgggt gcagagttat tcatatccag gcctaccag tcacgttctc ctgctggtaa 180  
cagaccacct aatcctaggt ctgctatgct gtgggggtga ccaccttccc catgaagagg 240  
atatcctggg agctgggtga atacaatat accaagaagg gccggttgaa tataaggtaa 300  
cgtttcttgg gctgggcaga gaaaaagggt gaaaaggagc cgggtggctg tgctgccttt 360  
gtgccaactt cattcacatc caggacggtc ttatggaaaa ctttggataa gtacaatttc 420  
tcctttttgc tgatatttga gaagttggca tttgggggtga acagatcctg gaagcccaag 480  
tcaggcaaaa tctcatccaa ttcataaggaa tttgaaatgg agaatttagg gagctgcaat 540  
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ggggacagca cctgctccac ctcatccaac 630

<210> 268  
<211> 485  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA893667

<400> 268  
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tgggtgtcct cggggaggac cgttttctgg aagccagtgc agaagggtgc cctgttctct 180



catgatcttt tcagaggaaa tccaaaatct ttttgtcagc aatcctgttg attccaactt 120  
 ttatcatcct gatgagattc tcttgtctga agctcttcat gcattcaggt acttggcatg 180  
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 ctctgttacg taagagtaca ttctgtagtt agtggtccaa ggatcctcag tggcggttcac 300  
 aaaaaacccc gcaccagtgc cgaagtccca gctgtcatct tctcctttaa tattgcagcc 360  
 acgggggctg gtatcaggag caatgaccac aaggccatgt tctgaggcag cttgttgaca 420  
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<210> 272

<211> 477

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA899113

<400> 272

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 atcacactat acatgttgtg tgatcttttt tcttttttct tttttttgga gctggggact 180  
 gaacccaggg ccttccgctt gctaggcaag cgctctacca ctgagctaaa tccccacccc 240  
 catgttgtgt gatcttaaag aaataaaatc actttgacta tgtcaaaact agtctttgcc 300  
 catccatttg tcccctacca cagctcccag tgagagttct agtcacagca atgtatcgac 360  
 acagacatca catcaaagat acttcaaact cctatgtatc aaagtagtac atggccttgaa 420  
 gacagatggc actaaatata taaaacacag tacagataaa ctggaacctt aacacta 477

<210> 273

<211> 536

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA899195

<400> 273

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 gacgtgtatc ggtagccatg aggaaatctt ccagagctca gtctctcact gtcgcccagc 180  
 tgacaagcac aagctgtggg ctccatccgt agtcctgcat aaagcaagca ggacacacac 240  
 ctgtgaccct agtactcggc aggcagagct gggaggaggg tcaggagtct aatgtcagcc 300  
 tgggctacaa gagaccctat tctcacagaa gaaaaacaca gagcatgttc tagcaaaggc 360  
 taaggcacgt ctcccacaag tggaaagctg gaacatcagt gtctcggcga cagggattct 420  
 cctaattcca ttagtgaagg gcgtctcaag tcagctggtc accggagcca tgggtctctg 480  
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<210> 274

<211> 472

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA899256

<400> 274

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 cactttcagc gccatgaggc agcggcacat gttggcataa gccacagaga agttgggctc 180  
 tgaaatggct ttctcgaaga tgagggtcaat gactcctttg aggcgttcct ccgtgtcaat 240



ggccagctgt gtcacctgct tcatcagctg ctgaaacatc tgggggtgtca gcttattcaa 300  
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tcgatactta tcagcggctg tccgtttgct actgggtttc cacgccttct ctgctttggt 420  
cagttttatg tcttcagtca ttatcactga agaaatgatc ttgcgagttt cc 472

<210> 275  
<211> 343  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA899498

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taaaggccaa ggagagcccg tcatccaggg gcaggaggct aatgtagacc ctggcgtccc 180  
gcaggatgcy ctcgttttagg ttccgcacac attcaacagc cttgttctgc gtccaccacc 240  
gctatgtcga aggttccggc ctcgcccgc gccaggagct catccaaagt ctgcagggcg 300  
ggctgcagcc gaaggtcgat cttctgctcc acttctgcct gct 343

<210> 276  
<211> 333  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA899635

<400> 276  
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ggccatcgaa gacggaaatt tggaagaaat ggaagaggag gtacggctga agaagaggaa 180  
aagacgaaga aacgtggata aagatcccg gaaggaagat gtggaaaaag caaagaaaag 240  
aagaggccgc cccccagctg agaagttgtc accaaatccc cccaaactga cgaagcagat 300  
gaacgccatc attgatactg tgataaacta caa 333

<210> 277  
<211> 470  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA899721

<400> 277  
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atttttaaat tacatgttat ttgtgtgtgc atgtgcaggt gtgtgcgtgt gttggaggac 180  
aacttgctag agttggttct ctcctacat gtagatcctg ggggaaagac aatctcaagc 240  
tgtcaggctg ggcagaaagc accactatca ctgagccatc tcaccaggtc aataggcaca 300  
gttttataag gaagttttaa tttctttgtt gtcttatagc actggagaat gaattcaggg 360  
cactatagaa gaaagtcaaa tgcattgcc ctaagctata tcctcagtct ctcacaggca 420  
cttaattcat tatattaaga aaaaaaggg ggggttgagg atttagctca 470

<210> 278  
<211> 344  
<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA899797

<400> 278

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tttttttttt ttttttttaga atggaaaaag agataaatc atctttatct gaagataaca 60
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gggcataagc cataactcaa aaattaactg ggggtgggga tttagctcag tggtagagcg 180
cttgccctagc aaacgcaagg ctctgggttc ggtccccagc tccgaaaaag aaaaaaaaaa 240
aggaaaagga aaaaaattaa ctatattctt atatgttagc acttgaaaac tcaacatagc 300
caggcactgt ggctcacgtc tagaataata gcactaagaa agct 344
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<210> 279

<211> 426

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA899847

<220>

<221> unsure

<222> (1) .. (426)

<223> n = a or c or g or t

<400> 279

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cttacagtga acttttgaga tcacacagat agacaggtag acggatagac acacacacac 180
acacacacac atacaaacac acacacacat acaaatgtgc atacaagaac tataaactgt 240
taatcaaaat tatgaatgat aaggattaag caatttatat attgggaaat ggagganggg 300
aagggcagga aggagtgatt agagaaggct caatgaaggg gatgacggtg agcaagttct 360
ccaagcatgg ggatgaaatg gcttccaggt cagcataaca gcttgaacc aagtaatatg 420
gtggaa 426
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<210> 280

<211> 351

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA899964

<400> 280

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acatcggttt ctttagtaat tctaagctga tacaggttcc ccactaggag tacacatggg 120
gagtgactgg gcgcgcggtg acagtgacaa accagtgagc cactgtgatc catagaaagt 180
tacattagca atcaggagag aaagggaagt gtgaggtggc ccataggcaa gatgtgagca 240
gagcacctgg acccttcctt ccctacatgc agtgcttggg ccctgctgac gggcacagtg 300
accttatgac ctatagtaag tggccagcct ctgactgcta tgcattggtca g 351
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<210> 281

<211> 480

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA900009

<400> 281

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aggaaaaaaa gaatcacaca tacagttatt ttaaaaaagt aagggttaatc ttgatcggtc 120
ttgaacacat ttaaacgtgt aggcctttgcg tactcaatct tcagagtgcac acagccagaa 180
tagatatcag ccccatcag tgaggcctta acgcgctggg cactttgcac agaatcaaac 240
tccaccatag cctggactcc attcttccgg aaaatgacaa ttctctggac agggccacaa 300
ggattacaga tagtgtaaag aacatccgtg gttatggagt agatgggggt caggatggta 360
aacagaagca cactgttgac gtcctgggag tcatcagagt caccggggcg agagatcttc 420
tggctggtag aataattgac aaaagcaagg tgaccagcaa tgtagatctg gttgtctgca 480
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<210> 282

<211> 493

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA900290

<400> 282

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agacattaag ctatttacca tcttaccaca ctggtcagtt attttggttg gaagagggtt 120
caacaattgg aagagaactc cagggtatct ttttgactct tacatTTTTT tttagaaaat 180
ttgaacccaa tcatctgggt gtcttcggga tttttttcga gagaggggtct tgatatacag 240
cccaagctgg cctccaagac agacttcctt gtctcagctg agtggtggga tcacacctgg 300
catcttgata ggatgtctca ctaatatctt tagcagctgt tctcaagcta cttgtaaaaa 360
gcacattgca gaagaagtga tggagtaatc ttcacatcta ccaatgtcat cacaacagaa 420
aaggcacaaa taccgacag tgactacagt ggaaactaga accgaacgct acagaatctc 480
tgaaacacaa tga                                     493
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<210> 283

<211> 527

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA900506

<400> 283

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acatgggttt taaacacagt gaggcgtatg catctgagct ccgttgggtca caacacagaa 180
atgctgccgt aactttgctg ccatcaggat tctgcgccgc aatgggtttt gggggttaggt 240
ttaccgccgg aggtggctcg tcacataacc atcggctgtg gattccccag cagcacagga 300
gccagtctca gcaaagcgcg gactggcatt tttaggtgtc tgaacctgaa taggagttca 360
gcaaagcttg tgctcccttc cagtcccatg ggtggcaagt gtcgcgggtg tggcacagag 420
tggttagacca tgaatcaggc caccatgttt agctgagact tctcaacagg ctgcccacta 480
aggtaggcat gcacacacac atcgctcca gctttagacc actgggtc 527
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<210> 284

<211> 274

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA900548

<400> 284  
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 tataagaatc ctgaggaaga ctgacaagaa tatgggctag ggattctcca gaagtctcag 120  
 gctcatcatc tggggtgagt tactgtgacc tcccttaaaa tcttggttct tcacaacaag 180  
 tcgggcaatg gttttcgaaa ccggaccgct aagcttctca tggatcatca aggtgttcca 240  
 ttaaacatgc actgtaaaaa tgacgttttc tcgg 274

<210> 285  
 <211> 406  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA900553

<220>  
 <221> unsure  
 <222> (1)..(406)  
 <223> n = a or c or g or t

<400> 285  
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 gggccctaag gttttgggtc tggagccaag attctttctt caatatgcct ggcctggggc 120  
 cctagtggct gaggagacaa agtgaggggc tcccacagta cctggactag gaccgagaca 180  
 ttcttgccag cccaaggaga tacaggagct tcagaaagag gctcctcatg gagctgacca 240  
 ggagctcaag gttccaataa cacatgtgag tgccggagctg ggaacacatc ttccattgga 300  
 ctgtcctggg gcttgtcttg tcaactcaagg caagtggagg tcagaaattg acactcangg 360  
 caccagagat aaaagacatc tgaggccatg gagaacaaag atgctt 406

<210> 286  
 <211> 535  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA900580

<400> 286  
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 gagtccttta cggactaact gggaggttta gaattcccag ttgctggcgca cttgggtttc 180  
 tttaatgtgg ctgcgctga aaactctaga cggggtgcac gacctgggaa agccaggcgc 240  
 tcccagctag gcccgggaaa agcacggaac cgggaggctg accttagtag acaaccctgt 300  
 agctcctcct ccgggttagga cggcctggca gccctcacct gctttcatca caggtctcat 360  
 tcgcatcatg ttgtccatca ggcccgtgca gttagcccagg aagccgatgt agacaagccg 420  
 cgggtcggtc agcttgggcg ggggcagtct ccgggcctca tccggcaaga atcttaaggg 480  
 ctcatggccc ggccggccgt tcatcatatt gatgcggggt ccacgtgagg tctga 535

<210> 287  
 <211> 398  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA900613

<220>

<221> unsure  
 <222> (1)..(398)  
 <223> n = a or c or g or t

<400> 287  
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 ggcacatgcc ctgtgtactt cttcagtggc aggtggcact ggccctcagac ccgtaaccag 180  
 ctgccagggt aagagtagtg aggggaacga gagtggccag ggccagggca ggaggctgac 240  
 cccctcgtc ctatgacacg agtgccacca ggggtggcag caccactgct gaaccgaggg 300  
 gaactgcana gacaggcttc tgggacccag ccactgggga ggccaacagc agtgtgcggc 360  
 ccttcagtgc atgtggcccg ggtcatcatt ccatcca 398

<210> 288  
 <211> 534  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA900863

<400> 288  
 tttttttttt tttttttgcc tcaaaaagt acattttatc aaagagagag agagagagaa 60  
 aaaaaaaaca aaacaaaaaa acaaaaacaa gatgtccatc ccttgggtcc cttccctccc 120  
 ccctccagct gttcctcagc cctgccccca ggactgaacc ctgggctagg gccaggtagc 180  
 aggacagccc ctcaaagtga gtcagcaacg ttgaggggca tctcttcaat ggagggtgtg 240  
 tagaaagtct caatgtctcg aagagtcctc ttgtcttctt ctgtcaccat gttaatagcc 300  
 acacctttcc ggccaaaccg accacctcga ccaattctgt ggatgtagtt ttccctgttg 360  
 gtgggaaggt cataattgat gactagggag acctgctgca catcaatgcc tctggccaac 420  
 aggtcagtgg taattaatac tctgctatag ccagaccgga actccctcat gatcacgtct 480  
 cgttcctttt ggtccatata tccatgcatg gcagaaactg ttaaattccc ggca 534

<210> 289  
 <211> 447  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA901006

<220>  
 <221> unsure  
 <222> (1)..(447)  
 <223> n = a or c or g or t

<400> 289  
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 tggcaagatt taaaatgtca acttggagt atcatgcaag cccatgcatt ggtgcctgcg 180  
 ccctaattgc aggaccact ctgctcatcc ttgtggctct gtaccctcag cggggttcgt 240  
 agtaattctt ttcataaag gtattgacag tccaactaac aacctggatt cctttggctg 300  
 accattctt caattgtccg gggagacaaa atccttctgc atgaggaagg ctgaaatccc 360  
 acacaggtac cacaagacat tgtgcatgct ccagtcaagc aagatgtcca acaccacana 420  
 cacagactgc ttccaaaaga cgctgta 447

<210> 290  
 <211> 330  
 <212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA901107

<400> 290

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acaaaggaca gcgtgaagat gtagctgtgg tcatccgtgc acggactggg ctcttggtcca 180
tttagctggc tgtcatgtca aggtttctta aatgccaaacc tcagtgggtt ataaattatc 240
ggccccccga ggatttcagc aagtccagat catccgtctt cgaatccatc tcttggtact 300
gaacttgatg tatcaagacc cctcgtgccg 330
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<210> 291

<211> 412

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA901152

<400> 291

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ataaatatac actaagatgc acactatcaa cagggtgtcct caacgtgagg ccacaacaca 180
gggacgcagt caactttaca actcaggact ggctggactg gggagtggagg gaggggcagg 240
tcgaggggtg ccgtgggtgg ctgttattgc tcaatctcgg gtggctgaac gccacttgct 300
cctctaagaa gttgggggac gccgaccgct cgggggtcgc gtaactagtt agcatgccag 360
agtctcggtc gttatcggaa ttaaccagac aaatcgctcc tcgtgccgaa tt 412
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<210> 292

<211> 580

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA901338

<400> 292

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agaaaaccga aggacagatc aaattgaaag aattactgtt ataataactt taatttatct 120
tgcattttac agaagtctat gaacgatttt aagaagcacc tccttactcc atcacgtttc 180
tctgacagtt gttaaagtag gcaacgagta tatcaacagc ttgaataccg gtatcttgca 240
aggatttcag aacaatcact cgccaaagaa cttggcagtt tctatcttgt ttttaactca 300
atggtacatc cactctgatg gtaacctgtc cagccaaatc tccaccacat tttgaaaaaa 360
tcaatgggtga ttagcaaatt agttagcttt ggcacggagc tgtgctcgct tgctgtgac 420
agcctggaag ccagttttga tactggccac agagcatcga gaatgacaag tttcacactg 480
taagaaatag agtcgggtgt ctttctgtaa gattgtgtcc ggtgaccggc atgtgtgaca 540
agtgacgtat tccttgatat atcttctcaa gacgttttct 580
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<210> 293

<211> 492

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA924036

<400> 293  
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 caatttttct catgttcttt ggagtcttgg gtttttgaga aaaacaataa ttccaggagg 180  
 tacaaggaca attcttcccc aaacgataac ccttaacaca tcttacacaa aaaaaggagc 240  
 ccaggagaaa ctggaggatt cacggtgtct aggttataaa tatcaattta aaagtcaccc 300  
 atatcatgta actcaggagc ctctgttcca acccagtggtg ttttatgaaa caaagagaca 360  
 gggctaacta aaggaatcaa agaacccttc tccaagcact gacaccaatc taactggaca 420  
 ccctactctg atcccatgtg tccttgtcac aaagatgatt ttaaaaagtaa gaaagctgct 480  
 tgctctgaaa gg 492

<210> 294  
 <211> 494  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA924152

<220>  
 <221> unsure  
 <222> (1)..(494)  
 <223> n = a or c or g or t

<400> 294  
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 gagctgggtca ggcaggcggc atcccacagg agagtgggtg gagtccttgg gcagcacctc 180  
 acagaatgat ttggttggtg aagcttcgac tcagctcctt atgtggtaga acaatcgagt 240  
 tcaagataag cacctcagcg gggatccgta ctggcagcc caggatgggtg atggcaggaa 300  
 gtagctttcc atctttgaag aggtctctgc tgtccatgcg ggcgcggggg tcattgggat 360  
 tggggtcatt gggagtcccc tctacgcggg ccagcgccc cacagtgtct cccagccca 420  
 caatgctgtg aaggacacag gtgtgttctt gcantgtggc tccatggagg acaatactct 480  
 cccgcagacg caca 494

<210> 295  
 <211> 292  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA924196

<400> 295  
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 aaaaccttta agtactaaaa ttttacatca tgatttggtt aacttaagaa gtgttatgac 180  
 gttgagaact aatagattta aagcagaaat gatgacttcc acaagaatca gtcactcctc 240  
 ccaaacatga gaagggaagg aagacaagga aaaggtgaga cagaagaatg aa 292

<210> 296  
 <211> 380  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA924236

<400> 296  
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 ctactggcta tcttggaaca ctcaaaaaga gtctgtattg gtgaaacgtg ggatcagttc 180  
 tatctcacia aactggaaaag attataattg agacactgta ggcagagttc agcatgaagg 240  
 tgcctgactc acagtaaag ttcagttcat agttactggg atctactctt aactttaatt 300  
 cctcaaagct ttaagcttct aaatcttccc ctgggattaa aagtctcata aaatgtgtac 360  
 tttcctctat tttccttctt 380

<210> 297  
 <211> 226  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA924261

<400> 297  
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 cattgtgaat ggcccccatg gggtcatttt tatacagcat gaagtagcct tgcacctggg 180  
 caagactaat ctgggatgta gctttaagga catgttcagc aaaatt 226

<210> 298  
 <211> 464  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA924289

<400> 298  
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 ggccttcatg cccagaaaagg cacgaggggc cagggtgta atgaggttcc ggtccaggta 180  
 cagcttctgc agcctgggca aatgtacaaa gacgttagct ttgacgcttc ggagtgcgtt 240  
 cctgctcaga tccagctccc gcagctcgcc caagccacag aagagcgcag gctgcaggta 300  
 agtcagtttg ttgccagcca gcaccagctc gtggaggttg cccagtcctt ggaacactgt 360  
 gtcaggcagg accactagac tgttccaacc caagttgagg tcccaaaggg gactgaggcc 420  
 ctggaacagc ccttcttcca gccggcccaa gaggttgctg ctca 464

<210> 299  
 <211> 441  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA924301

<400> 299  
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 aaaacactta atagatacta aataaataga actggctgta aatctaagtt ctctgatgat 120  
 aaccatacaa ggatccgcct gggctgatta gtttgggaga tgatctggag gttggttaga 180  
 ctctccttca tcttcaatgt aaactgtgcc tctggtttcc aaagttcccc ttgtttctcc 240  
 aaacgttgta tgtctagaaa catgttttaa gaaacaaact ggagaattgt atgggttttag 300  
 agtgcagttg agaagagaat gaggggtgtt ttgtttaaag tacagaacaa gaaacttcca 360  
 ctgcttaact gattatccag aagtgaacaa gaaactgagc taaagggtgt gctggtggcg 420  
 gagaaaggga gcaacaaaga t 441



<210> 300  
 <211> 441  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA924307

<400> 300  
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 tgcgtgaate gctgcagcaa ggctgggcca acctaaaggc ctatgcaact tggcatctgg 180  
 accagggacc gtttccagac cccacaaggc gaagtgaact aagctgccgg tggctccgat 240  
 aaagcgggtca aagtcccgtc ccagcggctc ctgtgcctcg tccgctttgt cctccgcgtc 300  
 ccctgagaag ttcagcttcc ctatcagccc ctctcccatc tcttctgtca ccatcacgaa 360  
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 cacctgcagt ccgtctgcac c 441

<210> 301  
 <211> 355  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA924405

<400> 301  
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 tctgcgactt tttctttttc tttgtgctgc tctttgtgca gcttgacgca gcctcaggct 180  
 cctcagaaaa tttccttttc ttcttagggg tgatggggct tgctgcctct tcagggttcac 240  
 tggccacttc ctcttttaggt aaggacttct tttcttagg aacacttatg ctgctagtag 300  
 ccatctcttc aagatcactg gccaaactct cttggggaaa agctttcttt ttctt 355

<210> 302  
 <211> 384  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
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<212> DNA

<213> Rattus norvegicus

Figure 1 consists of 12 sub-graphs (a-l) showing the time course of various physiological and behavioral parameters during the first 24 hours of a 28-day study. The parameters are: (a) Rectal temperature, (b) Heart rate, (c) Oxygen consumption, (d) Energy expenditure, (e) Food intake, (f) Water intake, (g) Urine output, (h) Urine osmolality, (i) Urine pH, (j) Urine creatinine, (k) Urine urea, and (l) Urine protein. Each graph plots the parameter value against time (hours) for three groups: Control (open circles), Dehydration (filled circles), and Rehydration (filled triangles). The x-axis for all graphs ranges from 0 to 24 hours. The y-axis scales vary for each parameter. The graphs show that dehydration leads to a decrease in food and water intake, a decrease in urine output, and an increase in urine osmolality and urine urea. Rehydration leads to a rapid increase in food and water intake, a rapid increase in urine output, and a rapid decrease in urine osmolality and urine urea.

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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA926262

<400> 328  
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gctaaaatac attgggtact tatggaagga ccacatgtta caaaagcctg cgttttcagc 120  
agcgtacaac tgcaactcta cgtaaagtcc acaaatgcac aataccggtt cttgctcta 180  
tttacatagc tgatatatct accctaacag aggtgggtca attacagttt tgtgattgct 240  
cccgtaccg tgactgcaca tccacccagg gccagtcacg agaggacagc ctctcacact 300  
cttggttagca tccgctcagc ctacaacact gaagaagaaa gccacactca agacacaagg 360  
aaaacaagtc agtccagtct agagaagaac attccgggaa acagagtacc aacaccttct 420  
t 421

<210> 329  
<211> 512  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA926365

<220>  
<221> unsure  
<222> (1)..(512)  
<223> n = a or c or g or t

<400> 329  
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aattccgcct ggcccagct cgcggctcct cagggccaag ctataacaaa cataagggac 120  
acaaagcagg gaatcatcag atttggcttc ggaggtaggg gagggaaaca gcaggaatcc 180  
aaatgaggac agcctgggtg actggactgg gagggaaagg acttggtcga gtctcctgtt 240  
cccacccggg caagagccag ttgctcctca accttcagtg gccagaggc tgctcctggt 300  
tgagcctgtg gaagaagctt ttgccaaact cgtaagtgtg gatcatgatg gcgcaggagg 360  
gcgcagcctt gatgatcctg nggaggaaac ctgcaaagag tcccctgggt ccagattcag 420  
cctggattct ccgaagcagg agccaggtgg agtcaactct tggcggcttc actctcatag 480  
cctccactgc tcccagtgc atttgtcgct gt 512

<210> 330  
<211> 588  
<212> DNA



<210> 333  
 <211> 452  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA942745

<400> 333  
 agtcatctct actgttcgag aatagtccgg tctgcaccag tcaagcgccc ccaacccaaa 60  
 tcctcccaac acgtggtttt gtcccttttt tttctttctt tctttctttc tttctttctt 120  
 tctttctttc tttttttttt ttttaaggcc ttcagataaa aacgaaggat gaaattgtag 180  
 ggggaaaatg ggcgggatgg gggcgtggct gaggaatagg gcgtggctac cgcagagccc 240  
 attcctcaga ctttccgtca ttttctgcc a gccctttgcc cctgccaaaga gctttcctaa 300  
 accacttttt aaaacctaag gtcaaaacac agccactact ctctcagaga aagaagacaa 360  
 ggaaagggaa aaaaacaaaag gtgtcctaac gtaaagcacg aaatgaagcg gggaggggga 420  
 gtcccatccc aaagcaaaagg ggatgattgc aa 452

<210> 334  
 <211> 550  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA942770

<400> 334  
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 gccacggaaa cacattcaag atgttgggtg tcttctttgc tgcttgcttt gggttaaaat 180  
 caacatgaag cacacaaaaca gaagcatatc tacatttgca gcaaaggccg ctgcaaatac 240  
 aaccccaaag agagggtggg ctcagcgcac catctcacag caatgcaggg agcctttgtg 300  
 cctcctgcac aaaattagca cattcagggg agacgtgtgc ctcacaaaagg gccatgtgga 360  
 aagagttatt cactctcatc caaaaaatgaa gacagtctga gggacaaaat tgttcattga 420  
 ctctgctccc aacgtctccc ccattcccca aacaagccaa tgctcaagac acctaccaa 480  
 gccatgggca aacttgacca tgagcaaaca atatgaatga gaacagaatg acgtaatgcc 540  
 gttgtgcctg 550

<210> 335  
 <211> 503  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA942889

<400> 335  
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 agcatgcact tggcaagcgc cttcgtctgc attggcttcg gaaacgcggg tgttcattctg 120  
 tgccatggca tgtcttacct aatttcaggt ttagtgaaga catacaaagc caaggaatac 180  
 aatgtggatc accctctggg gccccatggc ctctctgtgg tgctcacctc tcccgcatgt 240  
 ttcaccttca cagcccagat gtttcagag cggcacctgg agacggcaga aatattagga 300  
 gccaacattc gcaccgcaa gatccaagat gccgggcctg tgttggcaga tgccctccga 360  
 aaattcctat ttgacctaaa tgttgatgac ggtctcgctg cccttggtta ttctaaggat 420  
 gacattcctt cactggtgaa aggaacactg cccagggaaa gggtcacgaa gcttgcgccg 480  
 cgtgcccagt cagaggaaga ttg 503

<210> 336

<211> 506  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA943131

<400> 336  
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 ggagatggca gcccaggcct gcacagcgac acacacccat gcaaccaca gggctactgc 180  
 cctgctcact ccttagacat gttcttgatg gtcttggtgct cctttatagc tcgctcccag 240  
 tcaactgcctg tgaattcctc ggtgaccacg ctgcgcacag tgccttcacg caggcagtgg 300  
 ggtgcgatac caaagccccc aggggtggag cgtgggggtat agaagctctg gacaccgcat 360  
 ctcttacaga aggtgtgctg ggctttgtgc gtgttaaagtg ttaggtgggt tatgctctca 420  
 gcaccttca ggagtttgaa gcgagaagct ggaacaatga agtgtctatt ctgcttcttc 480  
 ttgcaaatgc tacagttgca gtcaac 506

<210> 337  
 <211> 618  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA943564

<220>  
 <221> unsure  
 <222> (1) .. (618)  
 <223> n = a or c or g or t

<400> 337  
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 cattagatgc caatgactct aaaggagtgc tgggacaggc cagccagcat ggctctagca 120  
 caatctaggt gaaaagtctt gtgaatgggt gcacacacct gtgatcccg cacttgggac 180  
 agtatgggga tcaggaattc aaggtcagcc ttgggtatat aagcagtgtg aggtcacttt 240  
 gagtatatga tacattgctt caagaaacaa aaattcagga ctggagagat ggctccttgg 300  
 ntaagagcac ttaggaggat ctgctttttt cctagtaccc acagcacttc agtaactaaa 360  
 gatccagggt tccaacgctc tcttgtgacc tctgtgggca ccaggcacac acatggcaca 420  
 catacacaca tgagggcaaa acggaaaata cataagtcta gacaacttca ctctgtcggg 480  
 ggataaagct cccctccctc gggccagggc tagctccctc tatgcagcca tccggaaaca 540  
 ccacacggca accagagtta aggagatgct tcctttggta taaatatatt atatacatcc 600  
 aaaacatgac attaanat 618

<210> 338  
 <211> 513  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA943730

<400> 338  
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 gcggcgccgt gcgcgacgtg gggctgtcga gcagcagcgg cgactccagt cccccggcg 180  
 gctggtgggt gcccgcaccg aagccggaca aactgacgct gtggtgcagc tttggccgcg 240  
 gctccccggc aaagcccagg tgcagcgcgt cgcgcgcgcc aaacgctcgc aggtccccgg 300

aggcgcccc cgatgggtgcg ggccgcccgt cgtctgcgtt gtggatgaaa tggcagcgcg 360  
 ggccgtatgg gcagaagccg atgggtgtgga acgtgcggca cagctccgtc ttgtacttgg 420  
 ggtgccgagt gaggctgcgc agctcatgga agccgtgcgc gaactggcac ttctcgccgt 480  
 acctgcacat gccgctctcc tcgacaggcc ggc 513

<210> 339  
 <211> 642  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA943737

<400> 339  
 aaaaaaatca gtttattaat gttttaaagt tgataaagct atgtgcaaaa tgacacacca 60  
 aagtcaggaa cctatttaaact actatTTTTT ttttaaaaaa aagacatttc ttggtttaaat 120  
 tgcactgaaa acaataactaa aaagacagta atatatTTTT attctctgta tcatttacat 180  
 ccagggtcaa tacctaagga caactgaaga aaagaatttc tgatgttccc tgtcagttaa 240  
 agtaatgctt ttttgggtac aaaggaggc attttcttaa gaactacaca ttcaatgggtg 300  
 ttaacacagg ttaggaagaa attcaataaa atgacctcaa agaagcaagt acattcgaaa 360  
 atcagaaaact gctctttaa caaaatacaa ccagttgggt gacacagatc acacaacact 420  
 ctgaaataac caataaaagt gccaaagatg ctcgtagggg ttagagaaaag acatcaagca 480  
 acagctcttg ttttacacaa gtaaccctca gatttcacct cttttttttt ctttaccat 540  
 atctcctaag atcctggtca atataattac aaatagagta gacttcgtta cttccattac 600  
 aaacacatgt ccaatgtggt tgtaatggaa ataaggaaca ca 642

<210> 340  
 <211> 557  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA943785

<400> 340  
 aaacaagatc ataaataaca aagaacaaag tcggtcccag actctggacc gtgcagcagg 60  
 acaggggtag gaagttggtt ggtgaaaaga cagaagaggg ctacacagtc acctaaagaca 120  
 gtcacagaaa gatgggcttc aggaggctgc cctgccccta cccgtgagca gcagagggag 180  
 gccccagtg tgtgctggga cagctggatg agggcaaaga ctggggatgc tagtccatga 240  
 tgtttctaca gagtgacatg gaaaccacaa gtggatcaag aagctgtggg tctagaagag 300  
 gcaagcgggc acttggcaca cctccaggaa ccaactatga aaatgttaa ttcaatcctt 360  
 aaaaacaatt ccacagaatt tagcctgtgg ctttgtgcat gggctgtgtt taacctgggt 420  
 tgctctgtgg cagatgaggg ctcatgaggc ccttgagca gcctggcctc agcccaaggc 480  
 aggtgcccag acatgtggga gtgggacagt gggctcgccc agatgggaag ccatgtgctt 540  
 ggactggctg gacctgg 557

<210> 341  
 <211> 554  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA943791

<400> 341  
 aatacatcga tttgcagttt tacagggacc agagagctcc tcggtactac cgtattttat 60  
 gttgcacgca cagacacgca cacaatgtca ttagtagttt ctcatctcta cacttttctt 120  
 taaaaaaaaa aaaaactctc atgtgacaca gaaatctttc ccattacttt aacacagcag 180



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ttttttttta tttcacaaac agttgttttg tccatttttt ttttccagga tggcagtcct 120
cctatacaga gtgccagctc ctggctctca cccagtgctc caaacaacc cacacccag 180
gaggctgctg ctcatcattt attctcagtt agcgccatct ccaaggagac ggccctctgcc 240
ttgctggaag gagtgcaggg aagccaaggg tgaaggcact gattttttgcc caggatagct 300
ctctgacgct ggccctgtct ccatggctac acaggaggca tcacaccaca ttttgggggt 360
tatccactct gccagaaaag tgcatagcac ctgagtcccg ctgtagatg gcgaacagga 420
acggactgct cagggtcacg tccaacacct cgggtgagcc aggctgctgg gcagactcag 480
tgggcagctc ctctcgctc gcttgagtt ca 512

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<210> 345

<211> 114

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA943896

<400> 345

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gaaatcactg tttattggct gtgattccct cagagagaaa atgtgaggtc tctaactgc 60
aggaggtgca ggcacaagga cagacagaca ggtaacacat gggctattct aagc 114

```

<210> 346

<211> 554

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA944011

<400> 346

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aggggcagga gctgaccttc tgtaagaaga ctgggctgca ggtgataggg gtcatagaga 60
acatgagcgg cttgcctgc ccgactgcg ctgagtgcac caatgtcttc tccagcggcg 120
gtggggagga gctggcccgg ctggctggcg ttcccttttt aggttctgtt cccctggatc 180
cccagcttac caggagcttg gaggaggggc gtgacttcat ccaggaattt cccaaaagca 240
ccgcatattc cgcactcaca tccatagctc ataaagtctt gcaccagatg cctgctctgt 300
gctcctgaca gcctcgcagc cagggtcaaca ggttgctcta acagccacac cacacaggag 360
ctggcccttt ctcaccccga ctgaccctga gtgcccacac atgctgtgct gtgagccttt 420
tgtgacacag tgtgggtttac agttacatct ggtgacttta cagaactcca ctgttaaaca 480
tatcacccat cttgtgagga acccagcatc caaacaacc ctgtcctcag tgagatagct 540
cttgactccc taca 554

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<210> 347

<211> 636

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA944077

<220>

<221> unsure

<222> (1)..(636)

<223> n = a or c or g or t

<400> 347

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aagtgtgagg agcccacagc cagtcccgcg tactcccagc agccccgagg atctctctgg 120
agcacaggca gctagatgag acctcttcca aactgacaga tctcgggaga gccgggcctg 180

```



```

ggcacctttc ttcagtcagc aatgaagtcc agaagaatat tcacgacttt gatggttcca 240
gaatttttaa tgaaagcaag actgttgctc agatctattc agataagcag cagatttttag 300
gattttttta ttactgattt tgttactagt ttttttttta tcagccactc tcctatctcc 360
acactgtact cttcaccttg actggcctac tgctgaagg tggagaccac gccctgtcca 420
tttaggattc gccattcct gtctcttcca actcaaccaa ccactcgatt aatctttcct 480
tgcctgagat cagttgaaag cactggagtg cagggaggag agggaagggc caggctgggc 540
tgccagggtc aggtctcctg tgcactgaag gccacacana caccatgaga aggacctcgg 600
aggctgagaa cttactgctg aagacacgga cactcc 636

```

<210> 348

<211> 604

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA944157

<400> 348

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aaccaatgaa tattatccaa aattagagat gtaattgtaa tttacttgta caacatgaaa 60
ttatgctaata gggaaattac caaatactca ttagtggtgt ttcacattgc tatatgaaca 120
tgtgtctca actgctaata ataaacgtta taactgattc gatcactatg aaaaccatt 180
ttgcaaatgg ctgttcctgt ttagaaaaat tcatatagct ataaaaatgg actaaacca 240
ctttaatcct aacctacaaa tagactatta acagcaaata taactggtag cctctcaaca 300
ctgtaacaac tgggtgcagc ataatgtaca caatgcaaat agaaaagaaa acagtaaac 360
ccgagggag tgcattcttt tagcaataag gactattact ctgatgcttt ggaaaagtga 420
acactcatac ttcaaagtct gagtggtaag gctgaccgtc tctccctctc acatgtggaa 480
ggcaattccc tcgctgattt tgaagcatgt gcacaaccac tgtacaacag tcacttcaag 540
gttaaccagt tgtcttttgt cctacagagt ccaaaaaata tattaaccct ttccttttta 600
gaat 604

```

<210> 349

<211> 686

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA944158

<400> 349

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agacacaaat aataagttcc atttttattg tatgggaaat atggaccaga caactttaaa 60
agatgaatgc agtgtttctc aaagatatcc aatcttaagc atgactggag gaatcgcaaa 120
cagatttagg ctcaagtagaa aagaagaacg tatacttttg agctggggat gtagctaaat 180
ggttgagcaa tatgtgaagc cctggggttg aattttaaca ctgaaggata aaaaaagaa 240
aaaaaaaaag ccccatgttt taaaaccctt accaatcagg caatgtggga accatgccag 300
ttacagagcc cctggacagg gcaccagact acctaacaat gagacatttg actgggagta 360
agacgttatc tacagaacac agttttattt aagtccaaaa cacaaaacca cttcctttta 420
aaaaacaaaa aatgtattgt ttttactgca cgaatacctg gggctttctc caaatgcaga 480
ttatcaacct tcaggctcaa tggttcagat acacgaattt actacatcag aggagatata 540
tataaaaaac acgtctttca acgtcaccta tttggggctt ttctctgtaa gcgcaatttg 600
tcctcgacca agaattccatc ataatgaagt caaacctga cctaagcagg ctttgaaata 660
gaaccttttc aactaacaag aaaggg 686

```

<210> 350

<211> 587

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AA944165

<400> 350

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cagaaaagaa tcaatctcag gagggagcca cactgcttcc ggaagcaggc ccgtgggggtg 120
gtagtgtcat ggggtggcagg aacaaggcct ttagcttgcc tgacaggctg gcaatctcag 180
gatcctgggc ttcgtaagac ttgaccaggc gggcaaaactt aaggagacct tccccgtcgc 240
agctgaagcc ataggcttta ataacctcct gctggatctg tgtggctaca ggcagcacga 300
attgcagcat cttgcccata tcgttgccag cattgtctct agcctcgtcc atacgcacgg 360
cgttctctgg ggccgagaac gcttggatca cctccgcaa gaccaccttg gcctgctctg 420
cgctcagagc cgcaggctga gccgaggcgg acgccatagg acgccactcg gtgcttgaat 480
agtgtgaaca ctgagatccg gaggagccg cagccagccg cctccccac ggctgcggac 540
tagtggaggc agaaaggaag ctgtattgca cgaggcggaa gttcccg 587
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<210> 351

<211> 511

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA944269

<400> 351

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aaagagcaca tgtgcatgag tttaaaaaca gaagtgaat gtaaggagtt agaaagaaat 60
acaaaagaaa tctgagacac gaaacaaaaa aaatacatc tcgagaattg aaataaaaag 120
gtatctcact tactacaaaa tcgttatattt aatgtattaa gcagtctttt gattcagatg 180
cagcacgaga ctgagttatt cattatcagg tcagaccgaa actcacagac taaaggaagg 240
accacagcat gacccaatgg tcgcaggaag ggatgatgtg agtggagggtg gagcaatggc 300
catgaggat caccataaat aaactcata gctcatcagc atccagcagt gagcagatcc 360
accacttcag ctggcctcct tggacgactt gcaatgaggt tcttcacatt cacagagcag 420
aactcatagt tccaaaagcg gtttctcact gtctgtttt tcctcagctt catcttcaga 480
tcctgcttca gactcgggag gggagtaaaa c 511
```

<210> 352

<211> 486

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA944289

<400> 352

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aaaaccaa atctttattctc tagtttgtaa aggaaggtaa atgggttgta cgtttcgatc 60
caaggaacaa aacaagaccc agtaggcaga agtcatagga aagcagaacc caatccttgt 120
aagaatttct aacaattaga cagtagaagc aatgccttct ggaggtaacg gtgaccagc 180
acctcagggtg atgggtagag gctggcatct ataccctgga aaccttaaaa aggaaatcta 240
cccaggactt tccctgcagc caacccccca gctagtcttt cacataaccc ctgaagctct 300
gaaaagagtt ggggagggtc aggggtttta acaaaatcac caggaaggcg tatatttggg 360
gaagagcggg cagataaaaa gccaggcagg taaaggagta aataaatgcc ctgggaggat 420
aatatgcaca aaagagatgg aattgctaac tgtggatggg tcgctacaca tccgggggtac 480
ctccgc 486
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<210> 353

<211> 459

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA944304

<400> 353

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agatcgacgt agactccaga tggaaaagtga tttgaaagag cacagtgggt gcctgcaggg 180
actaccagag gctacgggtgc tgtctccttt acaaagggcc ttccgcaagc taacgggctg 240
ttccctggag tggaggggaa ggtgggtttca cttgggtttca ttcacaaact atttgggtcaa 300
agaaataagt aaagctaaat gaaagcacat ctggtagaaa tctgcagtcg tgagcgttgt 360
caagatgtgc ttggctctcg cagcacctgg cagtgggcag caggacacag gtcggaagct 420
caggggctct ctgtcgtctg ttctggaggt ggatccgtg 459
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<210> 354

<211> 539

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA944380

<400> 354

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ggtaaaatta gactaccctg ctctgtgcttt ttttttccag ttctgaaaga cttatagtgt 120
tcaagggtgaa aaattggcta ctggaaacca ggtaaggccc tcacaatcac ggtgtacgaa 180
atatattcac acctgtcaga taccactcgc taatgctgct gttctgagca taagctcatg 240
caaaaacctc gtgtatgttc ttttgggttt cggtgacttc acaatttgct ggaagaacat 300
ctatgaagaa aggtcttctc acaagatggg atcagggtcat ggagatcaaa ttcgggtctcg 360
aaggaaggac ttttttcaaa aataattaag gcagccagca cagccaattt tgaggtcatt 420
cccttgatga ggtacttcga gccagtctca aggtctgtgt attcaaagca atgcaaaaca 480
aaatggtaac cagaatgtgt gaagtgactc tggtagtaga cttggggaca gaggaaata 539
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<210> 355

<211> 542

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA944397

<400> 355

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agccaataaa ctgagaatgt ttcttcacaa tttcttttat tctcctttcc tccaaatact 120
cagtttggtc ttctttttaga tgcaagataa ctttggttcc acgaccatt gggtcacctg 180
tgtctgtcct cacagtgaag gatcctccag ctgaggactc ccaggcgtag tgctcgtcat 240
cattatgctt ggtgatgaca gtcactttct cagcaaccaa atacgcagag taaaaaccaa 300
caccaactg gccaatcata gagatatctg caccagcctg caaagcctcc atgaaggctt 360
tgggtgcctga cttggcaata gtgccaagggt tattgatcaa gtcagccttg gtcattccaa 420
tgccagtatc cacaatagtg aggggttcggg cttgcttgtt gggaatgaga ttaatgtgca 480
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<210> 356

<211> 534

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA944401



<210> 359  
 <211> 491  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA944823

<400> 359  
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 tgaaacgctg tgactgttaa atacctgctc tacaggaaca cttttataac agtgttcagc 180  
 tgcttgactg aaaggatgca tatatttcca cactgtttta cacttataaa ttaattcaca 240  
 ggattcatag tattacttta tagctccaaa tgggtattag caaaaaataa tacaaaatga 300  
 ctctctcttc aagcaacacc atctgcctca agtaaaacat attaaactac aacttggttag 360  
 tacacaagat ttctctgtttt attatcctgg gacatctcgt gctgtgggct actgctgttg 420  
 cttcattcat gtacttaact cttacctcca aagactggaa tgtcttttgc aaggaatatg 480  
 tacacaggca a 491

<210> 360  
 <211> 476  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA944898

<400> 360  
 caaaatgatt tactaaataa atcataactt tacaaaaggc acgaggcagt acgtttgcga 60  
 ccgttcttcg atatgtcagt ctaaaaggta tatagcggaa tcaatttgaa aaatacaaaa 120  
 atataactac acgaagtggg aaaaaatagt acaactgcat ttgctgatga tatgtcctca 180  
 ggaaaaagga agtgtaataa attaacaaaac tatgatcatc atcaccttta catcacaca 240  
 aaaaggacac aggagactta ttaaagggtt ctatgatgtc tggaatcttc tactctaaaa 300  
 gcttttagaga tttgagtttc gaaaacacca ttgcatgaac ttccagaaaa catatcattc 360  
 ttcacatcag cttcagtata tcagcaagca cgtttgtcat atacaaggta acagctgtga 420  
 tgcctaagaa aatacatccc catttatagc ttgattgtgc tctgtgtatt aaacac 476

<210> 361  
 <211> 409  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA944943

<400> 361  
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 cattgtaaat ttagatcagc taaaacattt tctctaatga ctaggattca ttatcctcca 180  
 gtgaggttaag gtgacgtttg ctttgtaaga ggagatgtgt ggacaagctc tgggtgtggaa 240  
 gagaatgagc gctgctggcc ttctccactc ctttcttcgg ataggccctc ttgttcggat 300  
 gaggtgggcc aggaaggcgg ggcttggtt tcagaaagca actcagtggg ttgtggaggg 360  
 agagtgcgtt cagctgcagg gacctcactg gatgaagata gctcaatgg 409

<210> 362  
 <211> 344  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA944956

<400> 362  
gaacggcttg ctttattaga aacaagggag atgtctggag tggaacagtg catttggtat 60  
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aagtgaagct ctcacgcccc cagatgcagc acctgatggc cacagtgaac actgtagttt 180  
aattcagtga aaaccgtcct agatctcctc agatacagtc tgtaggccca cccgccgtca 240  
ctctgcaacg agacgcaacg ggtctctggt tcaacaccag gcagacaagg ggcttccaca 300  
ttccaggccc acccaagaag gaaaggctcg agtactttgt tctt 344

<210> 363  
<211> 453  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA944958

<400> 363  
acagctagaa tctatttata tgtcccaggt ggggaggaca gaggcagaca acagagggaa 60  
ggccattcaa ggtctcagca agtcagcatc ctgagtatct gagtgggctg atgcaagacg 120  
tccagatggc caggacagca gcttcaagta gaccctgcgt ccatttacca gaggatgttg 180  
ttcctgggtc tgaccattc ttctcttttg cttcatctcc agggcacaag agctgacagg 240  
ttcagaaaag ttctctagtc cttcttgtcc agatcagtta gccggatagc ggggtgttgta 300  
gactgtgtag acgctgtccc actggtcagc tctgctgcc cagcccagaa gaggcttatt 360  
cacgaggcag ggtctctcag ccaaaaccca gagctaactg atatggatag tctcctgccg 420  
tggtgctctg gaggtccttg tcttcatctt ctg 453

<210> 364  
<211> 444  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA945031

<220>  
<221> unsure  
<222> (1)..(444)  
<223> n = a or c or g or t

<400> 364  
gaggatgcct catctttaat ggctgacagg ggagagggga gatacaggag gtaggcaggg 60  
ccctcacagg gacctcctgt ccctgaggtc gtgaggcttg tcacctttgt ctattcctgc 120  
ctaaacccca gagctgtccc tgtccacttt catgtatgct aaggacctct ccctggcagt 180  
cccagctgcc cagcccagtg tgtgtgaagt accctgcato tgcctttatg aaccagttgt 240  
tggacaggtg tgtcatctgc ctgcaatccc agcactttct ctatagaggc aagagggtaa 300  
ggagttcaag gccagcctca gctacgtggc aaattcaaag gccgcctttg gttacccag 360  
atcttgcccta atcagccgca ctgccctcag cccgngggtt ggggagggga gaaccacttg 420  
ttgattttct ttcacactct tttc 444

<210> 365  
<211> 456  
<212> DNA  
<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA945052

<400> 365

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cctccactta taaacaaaca cacgtttgca tggttggata ttagaaaatt aaacctttaa 60
ttacataagc tgttttcaag aatcacgtac agagatttcc cagagacgct ggagttggca 120
gtcggccacc gcagtagatt gagcccacca ttccagcaaa ggcgctgctg tcctcagagg 180
tagaacatgg gacccgcggt cgtggcacat ggatgtcagc tctgctggct agtggactca 240
cccagggcca gccaagcag tgcttaggca cgcagctctg gggagctggt ccgggcgtgc 300
tggcagctct agcccttcta tgtaggagag ggacctctgt gaggccggct catttgcttt 360
cattccattt ccccatccag gaatcatgtt ctaaataatcc aggtcgacac atcttatgaa 420
gttggttggt ctttatctga tattccaatc gccagg 456
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<210> 366

<211> 664

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA945076

<400> 366

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gttgggcatg gtggcatatg tctttaattc cagcagttgg aagaaacaga ggcaggcaga 120
actctatgaa ttcaaggcca gcttggtata catagttagt tgcaggacag gcaggactac 180
atagcaagac cctgcttcaa aaaaacaaga ataccagtga agaagcatta atgcactatt 240
tgttttatgg atcaattgga gaacaaaatg tggagatgtt ggcattacca tgaaagagca 300
atagtgttag cagtcgtgtt cagacctcct tgactaactc aggtagacag aggtgaggcg 360
aaagatgaag cctacagata tgttggtctc agctagagag actctactga taatggcctt 420
gggcctcgac aatggatttt ctgaaaatgc tgaggtagaa actgtttagt ctgttctatc 480
tgaatggtta aagggtgtta tcattccaga aaccacttct gctgctaatt atctcctcgg 540
tgcattgtga caagtgttaa aaggtgactt gtgtctgctg aaacatctct gtttactgaa 600
ctttcatctg gaaatgagaa atgcgaataa gaaataagag gtaaatttaa tttaagtaaa 660
ttaa 664
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<210> 367

<211> 648

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA945090

<400> 367

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tctctgaacc taataaattc cagtagcttt ttaaaaagac cagaatctaa gaactaaaac 120
tgaatctatt caaaaataagt cttaatggct ttgtataaaa atagaaatga aaatacactt 180
ttgtatgaat gggcttttat ttttaactga gggcctttca accccaaca tctcagtaat 240
gcatgaagga agtaactggg ggattctaga gcctcctggg ctccctacga attgccagt 300
tccgtccacc accccatatt aatttttttag agtaaacata ataaatttgc atgaaaatga 360
aggactagca gttgctgcct tgagtacttc ctaaaaagta agattgctga tgctgttatt 420
tcctatgtat gatactgtga tctgggcaag ttgactgaat actcctaaac cctggcaaaa 480
tgctatcctg tggtttaata tcatacaatg acctgatgaa agtaaacactt cccctccca 540
acagccaaac ctttgacatc tgtgacaacc agtgaagaaa gactacctag ggctccagtc 600
aaatcctgga ggttacagga gtacagaagc tatatctgct gatacaag 648
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<210> 368

<211> 705

<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA945123

<400> 368  
ctggacaaga attttaaagc tttattcacc atggacccca caaaatatat acttgacact 60  
gaatgtgact ataaatgaga agtgagaaaa taaaaatgat tcaaggggaa ttaggaagtc 120  
aacacttact ttaaaatggg aatgaagaga cagagttcaa aaataaaata actttgcatg 180  
gtcccaagtg gactagacac attcctttca aacacagtga gtgccacaaa acagccagac 240  
atattcagac atgcgatata tagctagaaa tccaccttca aagaaatagg gtgttaaaaa 300  
atgaaaagtc tctagaaaaa tcacaaatta ccaccatccg tttcaattct atcgggtgct 360  
atttttctca cactgcaaat ccaaaccoca tgtttctctg ggcatattccg gcatttcaaa 420  
gcccagcgca cactgtaaga gccactgtct taaggaaatc taaacagaag acagggttaat 480  
aaacagtgag gtcagtgtct tttacttcgg catgctacct ccaatctcac cagaggatat 540  
cttttgttcc cctcacttt agcctgccag gggatgacgt tgcccaaaca cattttcaat 600  
gttttctttt taacagttaa tataattcca ggatgcaagt ccatttcttt ctagaagggt 660  
cctaggacac ccattgaaaa gtcaaaagca atgaaaggaa aaggg 705

<210> 369  
<211> 352  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA945238

<400> 369  
aaaataaagc cagttttatt ataaaaactt taaaatgtga tgtaaaagac agtcatggga 60  
acactgtata agaagaaata ctgtgaggaa gtaaaatggtc acaagtaaatt tttacattgt 120  
ccgtgaagtt taaaaataat ctttatagta aagtgtcttc agagcaccat catttgaaca 180  
gaagatatatt tacatatcag agttcatctt tggccttttt cctatggcat gtgcaaggga 240  
agaggtcac ctcagactgt ggctctaccc tcttcatacc ctctcgaatt tgaggctcac 300  
tcacttgtaa attggcatag ccctggaaca gcttgaagta ataacagaat at 352

<210> 370  
<211> 300  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA945533

<400> 370  
aggaacagaa aagcatttca aaaggccatt ttaatgcaaa caaaatattt taacacatag 60  
caataaagca agttcaactt ctatcatcca ccactactaga tctgatcaca caagaaaata 120  
cagtgtcaac agatatctgt cccattcact caaccttaat tttagatatt tggggagatt 180  
gtagatagat agatagatag atagatagat agatagatag atagatagat aatagataga 240  
cagatacata gatggataga tagatgatag atagatagat agatagatag atagatagat 300

<210> 371  
<211> 505  
<212> DNA  
<213> Rattus norvegicus

<220>



<223> Genbank Accession No. AA945591

<220>

<221> unsure

<222> (1)..(505)

<223> n = a or c or g or t

<400> 371

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accagcgctc aggaggcaga ggcaagtgga tctctgggag ttccaggcca gccagggata 120
catagtggga cggctctcaa aattatttga acaggtaact gagacatgtg agatgatgat 180
gtggacagat atgactagca ccctcaggtc ctcccaggga tacagcaaaa ataatcacia 240
accaacattc tttaatcaga aaggcacttg agggccccta cagagtctta cacaagagca 300
gccctgcgga ttcccactca gccaccctcc ctcccactcc ggctcagagt tcatcgtgac 360
ctgtggaggg atctgctccg ggcttgatga agattccttc catggccttc cactgtgtgt 420
gtgcattggc actangcatg ccatgcacct catgctgccc acggattggg ttaccatact 480
gttcaacagt aactgacagg aacac                                     505
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<210> 372

<211> 556

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA945596

<400> 372

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gatcagagcc cgcccatcag agtgacgctg agtcggaatc agaattgtgt ccacactgat 120
ggcagctctg ttagaatgca cgtttcttca ggagcaggac gtgttccagt ttctgggaat 180
ttgagaagat ctggcctctg tctctgctta caggatgccc gtgggatcac tggagtcaca 240
gttttcaatg tgtagatgag actgtatgcc agggtaaact ttctgcaggg gcagcaagggt 300
gcccagcttc gctccctttc tgatagagcc cttataactta attggcttaa ttagaaaaat 360
tttgacgcag aaacctcttc ccgacagtcg gacgccatca ttgatggcgt ttttgtttct 420
atagggtttc tcttgcccca ctatcttccc cgtgaatggc gcataacca cagatccatc 480
tgagcacagg acgtccacac ctggatgatg cctttggggt ctttgagtaa agtactgtcc 540
acagccatag ctgtca                                     556
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<210> 373

<211> 615

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA945601

<400> 373

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acaaaatttt aagatattaa caatatgaaa cattaagaat ttacgtgaaa attccatgtg 120
tttgagatca gtctggtggc agctgcttct gtaactgtca aactcgcctt tttagatgca 180
tggaactatg ttccagacctt gctctcctct ggatcatagc agagcctgct gtgcgcagtc 240
acagatgaac agcacagggtg aaccgtgggg atgagccacc atggcttaac agcactcaag 300
ccagaccact tggggctgca cgggtgcccc gtaggtccca actttaacag gtagaagaaa 360
gctcagagta gtcggttcta tagcagctga caaaccttcc ctagaagcat gagacaaaag 420
cctgacttca cctggaaaagc cagtcaaaga acaggcagtc ctccctactc ctgccgtaag 480
aggtgagcac aaaactgaaa gcggatacct agctgaggtg ctggggccga ccactgacct 540
cacaaaggct ccagggccag tgtggcactc acgtgcgtta cttgcactac atacatgtgt 600
tgacacaggg ctcca                                     615
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<210> 374  
 <211> 520  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA945704

<400> 374  
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 tcttgtgttg gtagtggcaa cttacaatga gtogaatggt cagagcacca ggctagctcc 120  
 aaagaacaga tccattccct ccccaggtct gactcatcac agccctggac aggcagtagt 180  
 tgacagggac tgctttcatc caagtgcaca ccagctttgc atggaattat aaaaacatat 240  
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 tatatctagg gctgtgcaaa attcaaaagg actgtatcct tttgagaaag ttgagtccat 360  
 tacacacaca catacacaca cacaaaaaaa gtcacctgca cctctgagaa gtgccagggtg 420  
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 aagagagcca caggtccagg ggatctcctg gctgtccagg 520

<210> 375  
 <211> 594  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA945708

<400> 375  
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 atcgccattt attttgcaaa gtatttcttt aattgctgca agaattttgt gagaaattca 120  
 atcactctgt actccaggga agatgagtga aagtgaatgt taacttacaa ttttaattat 180  
 ctcataaaac ctaaataaaag attttaagtc gatacaacat gagttctttt aagtgaccag 240  
 aacatcttga atatgtttta cagatgtttc tatgagcaaa ttaaaacaca aagaaaatta 300  
 aaatagattc acattaaaat atctaaacag taagtgtaac actgtgagta ctagtaaaact 360  
 ctacatagtt tgttatattt gaacaaacac taaactccag gatggacgac ttattaacaa 420  
 aaacatacat aagtcacttc taaaaatgac aaatccaact tttaaatgct aaaaattccc 480  
 ccaagttagt ttttaggcac cagagaagtt ttctttcaaa aatttcaggt tttttttccc 540  
 acaagcaaag tagaaatatt aattgggact tcagcttttag agaaatttag ctcc 594

<210> 376  
 <211> 591  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA945751

<400> 376  
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 acaaaaaata taaaatgtac taaacagtgt cattatacac tactttgaaa attgtcacat 120  
 gtttctaaga aacaattact ttttatgcaa acacagcttg gctttaagac aatgacaaaa 180  
 gttatgcagg ttacacagtg gagtattact caactcccaa ctacgacagt gcctttacag 240  
 tctctcttta aacagcatag ggcttcaatg aaaacagagt gcaattaatg tcatggcttg 300  
 taaagtctga ttacagagggt acagcaacc agcagtcact ccagttagtt tccacacaca 360  
 cagtaaagcc acagtgggct agtgacacac actagctcca tcttgtacat actggtcaag 420  
 caaactcagc agaaatgaaa aatccattct tacaagtttt ttaaaattac tcttcacaac 480  
 tgctgtatga aaacaaccac agagacagtt tggaaagtct tctggaaatg cttacagata 540

tacagtacat tgccaatggc tgggacgggt gaagggacat gaaggcctcg g

591

<210> 377

<211> 489

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA945879

<400> 377

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catacactaa ctttatgtac agaaacaagt taaactctga aatggggaaa tagttacttt 120
tagtctcact ctctcatcaa tactgacgtc agacgaggag actttcagat ggggtgctct 180
gtcttcagtt gtgttcgtta gcatgggttc atccttagca atctccattc atcaagatgg 240
gactgggagc aagccagcct ccatgtctag acacaaacct ttcgcagctt ctttcctctc 300
gcctgtctcc taggaaggag cagtccccac ccgcatgatt ctgaagagtg tgttgatgtt 360
gttactgcga atcgcacccc gacaagcact gatcacctgg ttctttggct ttccaactcg 420
cagacggcct gccctctgga ttgcttggtt caccgccttc aggtttccta acagttcaat 480
gtggatgtt                                     489
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<210> 378

<211> 596

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA945904

<400> 378

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gtatgagata caattttgaa gccagagaca tggctcagaa ggtaagggca cttactgggc 180
aaatctaacc acctgagttt aatacctgag tcccacagtg ggaataaaga accaactctg 240
taaagtgtgc ctcttacctc cacacataca taccatggca cacatatgcc cacacgcaaa 300
aaacacacat atgtgcacaa taataaataa aataataaaa agaaaagccc tttaaaacaa 360
ttttgaagca taaaggaaaa atgcccttat ttattttaact taaatttctt accccttaag 420
tattcacatt aatacatctt atagtacatg tgaaatatga caacatgtga gttatgcaaa 480
gtatactaga ttaaagagca agtcaaatac caaaggacct aacaattttg gaaatgctac 540
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<210> 379

<211> 560

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA946011

<400> 379

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agatcaaata atttattgtg atattgggag taaatagata ttttattaac aaaacaaaaa 60
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gtcagaaaacc cagttctaaa gaacagctgc tgggtgtcact ttattgcatt caacctatga 180
aagggttggtt gtgggattga agtgactcac cgggaccctc tcaccccaac tggacacacc 240
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tcacacagca aagtagcttc ttgccctcaa tgcccacctc acctccagag cgctgagctc 360
cgcatgggag cagaacagca aggatgagtg tcttgctttc aaaagctttg ggcagacaca 420
aagacaatct atctcatctc agaattgttt tcctcaagaa gtctcatgta tccttgggctg 480
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gcctcaaccc tgccaggtaa ctgatgggtga ccttgaatgc ctgacccctcc ataacacttt 540  
ttcccaaggc tttcacctgg 560

<210> 380  
<211> 630  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA946034

<220>  
<221> unsure  
<222> (1)..(630)  
<223> n = a or c or g or t

<400> 380  
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ttaattttac attactctgc caagaaagaa aaaaaaaagg atttaaactc aagttacttg 180  
aagcctggac atacttccat gattagccgg gctacatcaa ggcgtggctt tgtttgcct 240  
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gtcatccgcc aggttacaaa gtaaggagga gggtaaggga gggatatttt cttcaagaaa 360  
aagcaacact taatttctga agaattcccag ttcataattt tttcccaaaa atggctgaag 420  
gaatgggttaa aatctcaaca tgagctccca cgtcctgtct gtgaaggacc agcagttgcc 480  
ttgctgaggt gactgctang aatgcacatg ggaagtgtac ggcccgagg ctgtgccagt 540  
gggctgaagg gtcactgggtg cgattctcta agagggtttct tctagaagca gacaactcag 600  
actcttcgtc gtacttcagc aaagaagtta 630

<210> 381  
<211> 447  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA946108

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tgaatgacaa tttgtctatt ttcttcatga attgggggtt gatagaaaat gcatatgtgt 180  
cactgaaaga cagagtgtat ggtctgtgtg gttggaactc aaaatgacat tgctctgtca 240  
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ttccaaagggt gaattctgtc atgtagggtt agtggtcagg gcagccattc aggctgacag 360  
aaccttggac ttctgtggct tctgtgatgg ggacagggac atggttgact tgaatattct 420  
tcagacagcc aaaaaatgag ttccaca 447

<210> 382  
<211> 476  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA946187

<400> 382  
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aatgattcta tgttgtttta tttactttta gaatgtttca aatagcattt caatgttacc 120

aaaatccttag ccataattgt aaacttcaaa accttttact ttacttttta catgcatttg 180  
 tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtacc atatatgtgg tactgtactg 240  
 tatgtgaatg ggtatctgaa aacaatgcc a gttctctcct tctactgtgg ggtacagaga 300  
 atgaactcag gtcatacaagc ttggtggcaa tcatccccc a cactgaacc atcttgctgg 360  
 ccacttctaa ttttttaaatt taccatggct ttccaatgga cattttaatt gattgggcac 420  
 agatatgaga gacagagaac caacttttgg ctgcatttaa agcatttact aatctg 476

<210> 383

<211> 465

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA946189

<220>

<221> unsure

<222> (1)..(465)

<223> n = a or c or g or t

<400> 383

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 tccctgctac acactctgtc tcagaaaacg ctcaaagagt agggccagca tgtggttcag 180  
 gcatgagggg acctgccctt ccctccccag gatgaagaac agggctgggc cagccaaggt 240  
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 ggggttgccc cccggctgct cctccaagcc acacagttaa ggccagagtt tcactttcta 360  
 atgcagccca tctctgacag tctctgttcc ctangcacgg tggacacagc aagacacagc 420  
 acacagacta attccccagt gtttggtggg acacgaaggg aggac 465

<210> 384

<211> 532

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA946361

<400> 384

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 aaacaaaaag agtccctct tcttccctcc ccatggaggc tggagggcgg accacggcgc 180  
 tacaccccca gccttaccac ctagtcttaa taaattaaaa cctcaaaaca gggcccttag 240  
 aagtgaacag gacagctgca gctcaggggg cttggtgcca ggcatatgcc cacaccacc 300  
 catacccttg cccaccccc atcatcctca acagggacat cacaccaac agggctagga 360  
 attcaatctt attttgtctg tgtccctgca ttccctccca ctgcagagcc agctctccta 420  
 tggaggggtg agatgaagaa gcgtcacagc aagggaaaag tggggaaggg tggtagagg 480  
 gtccggctct gcggagcctt cctgccccat ctggcctggc ccttagcccg ag 532

<210> 385

<211> 658

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA946368

<220>

<221> unsure  
 <222> (1)..(658)  
 <223> n = a or c or g or t

<400> 385  
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 aatccattta ttataaatta catcttttaa cactataaca gctctctgaa gttacattag 180  
 ttgtggctga gcagaaagag aaaaacctac tcagttttca aaagagctag gcagcctgga 240  
 acttgacaac atacttaaaa taaagagcta aaatgtgcta aaaatagttc atttcatggc 300  
 gaggaacaga acatataagc tctgtgtaag aaagtaaaaa gaaaaaata tctgtgatac 360  
 ctggccttgt tgttgccaag gacaccagag agggagaggc ttaaacaata tattagcaat 420  
 gggtcatatg tgaattgttc atttttcac cttaaatctt taaaatgatg taatacttat 480  
 gacatatcat gtgctgacag tcacaaggaa catttgctat aaatgaaagg gtcacccag 540  
 acatgataac agtttacttc gatgaggaac aaagcgtttc ttagaatata tacattcttg 600  
 aaatttgcca acangaaaaa aaaatcagta aatcagaacc aaagaagata attagttc 658

<210> 386  
 <211> 527  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA946379

<400> 386  
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 acgtatttgg tactcctgat ctgtttatat taaaactgtg ggggaaacga atatctcgg 180  
 aagcgctaca tttccagtcg atcgcacctg gcacggaaag cgtcattgca tcttaggtcc 240  
 tgcttgggtat tataaaagac taatttgaag tcctaggatt caaaataaac atcatttgga 300  
 ataatagata tatacatcaa aaatacatct agaaaggcat tggttagtgc tattaaaaag 360  
 ctgtgtgctc aggtactctt ctccctacag gcgaaacccg gtggaaatgt ttgaattccg 420  
 tttctagcaa tttgtctctg ggggaaggta gtcgaaagtt acctgggtcat attcttactc 480  
 ctcactctca ctgtccatgt caatgtctac ttccctcgtg tccacgg 527

<210> 387  
 <211> 594  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA946428

<220>  
 <221> unsure  
 <222> (1)..(594)  
 <223> n = a or c or g or t

<400> 387  
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 cacacatcca ttaactattt tctcctaggt cttagactag aacacaaagc aataagagct 180  
 gtaaccttac tttgaatagt gaggaggatc ataatacataa cttggccttt atctgggttt 240  
 accacgaaag cagttagcaa acagtgccgc acagttatgt tttagtcaaa aatgagggtc 300  
 agacacaata tgggtcccata cggtcctatc tctttgtgac atcataagca ccttatattt 360  
 tttaatatatt gttcaatgga actccccggg gtcatacttc tcaaaatcca tcccaacaag 420  
 tgggtgcatgg ctgcaaatga tgatgcttgg agaggaatatt agctgtctac tcagtctgca 480

aatcacaaatg tgggtggcctt agtagttcta atgacttacg tgccaggaaa ggggtccccct 540  
tccccatttg cttaaaaaga tctagctgtg ccagtgccan aagttactta cttt 594

<210> 388  
<211> 680  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA946441

<400> 388  
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tgtctgctca ggttgccctga atgggtttttt actcagtacc accaactctc tgggaactgt 180  
gagtgttaact gccagatcat aaattgttta cattcttttt gttaaaccatt ttattaagaa 240  
aaaaaggtag atggacataa aatatgatta aaaactgctt ttccatagat ttctgaactt 300  
gcaaaagagg cttcagttta atgtgaaaat aagcactttt tttttttaca aaaaaattaa 360  
cgtattttatt agcaagggtca ttacacagc taggccctgt catttcattt gttgattttg 420  
tttttaatat agattctcaa taaaacaaag agcatagagt aaatttaggt aactagctca 480  
atgccttcac gtagtaactt cgttaaggctc tctgaagtaa ggctgtgtac tttgttgtgc 540  
tccattctgt tctgtccagc atagaactaa atacaatgca ttcttgctac acacagcttt 600  
acagaagggg atttatgaag ttttagaagg ggtgaatgat tattttcact cagggtgcac 660  
ttaactcctt taagcaatct 680

<210> 389  
<211> 529  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA946466

<400> 389  
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tcttctactt cacagtctaa gtctgtgccc ttaactccct gcgtgggtggc ttgttaaggg 180  
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caactgaggt gttcaattgc aggccacagt tgactttcag cttttctgtt ctccctaata 300  
ctagagtggg agtctgagac cagaatacac agtcacctcc ttctccaaag atagcaaaca 360  
ggctacggta ggcctgcagg taagggtggc cagaggaaat taccaatgcc atggcctgtc 420  
ccatgaccat aattgggccc aacttcccat aaggctcttc tagcaaaggc ttccaccact 480  
ctccatgatg tagccgcagg aaagacaagt ctggacagat cgatgtttc 529

<210> 390  
<211> 557  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA946476

<400> 390  
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gccactaagc tacatccaca accgtctagg ggagttttat ttaagaggca aatgtggaat 180  
aagccttgaa catgggatcg aattaatgat gaaattccat ggtctcaaaa agctacatgg 240  
aaggttcttg aagccaaccc tgggtggtctc caaccctggg ggaaccccca gaccatttct 300

acggatctct gagacacact ttgtgcaggg gctcaaaggt gactcaaaat gcagctgctg 360  
aaagtctagc tcaccagcag ccagacggca gcaccaagcc tggagcttgg tgatgcaagc 420  
ctcagaagac tccggaggct ttgtcatgtg tggctttaga agccaggcat ctgttgtgtg 480  
tgggacactt gccagattt gatatcacgg ctgtgctcaa gggctcgatg aaattttgtt 540  
ggctgcgtag aacaaag 557

<210> 391  
<211> 654  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA946503

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tgggtggggca gccaggtgat tctctggcaa caggaaagat ggagcggcag acagacaggt 180  
gggacctgaa ccatcaggcc actgcacatc ccagtcagcc acgctcaccg tctgttcagt 240  
tgtcaatgca ttggtcgggtg ggaacagaga aaacgatgtt gttatccttg aggcccagag 300  
acttgcaaaa gctgacgaat cgctccttca gttcatcgga cagccccttg gttcttccgt 360  
acagggtgac tttgaagtac tgtttgtttt cagaggtcctt ctggaaaaat accatggcaa 420  
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gaatattccc caggggtgaac tggccaggcc tggagcttgg aacgaatgtt ctgatccagt 540  
agcgacagcc ctggcccctg acgaggatgg aagtgacgtt gtagctattg tcttccgtga 600  
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<210> 392  
<211> 437  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA955071

<220>  
<221> unsure  
<222> (1)..(437)  
<223> n = a or c or g or t

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ctcttcccaa gaactgccag aaagatctca gccctttaag tagcaaagaa gggtcacctt 180  
taacaacat acaaaactcc acctagaaaa gtctcatgtg tagaaagggt gtagttatta 240  
caagcatcac attttgggga caggaaggga agtcagagt ggagacgggg gacagtgtgc 300  
agggtanggc gacacacaca ccagcccagg ggtcactctg ggtgaggaag ctacagccga 360  
ggagtttcag gtgatctgca gaggggtctc caacatctcc atgangaagg tgtcaatggg 420  
ggtatcccca atgagct 437

<210> 393  
<211> 298  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA955249



<400> 393  
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 tcttgcaaac acctgctggg gctgtatgta tagctggatg gagcccttca ctggttctag 180  
 accacgcacc acaagcatca cagggaaaat aattcgtgta cctctgaggt aaattctaca 240  
 aaaccaagag cattcagaca catgcttttg atcacaagga gactgccttg agaattatt 298

<210> 394  
 <211> 408  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA955443

<400> 394  
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 ggtggcagga gaagtggctg ggagatgtgg ggcattgtct ctaatgggtt aggcattggtt 180  
 tttcagtcct cctcccaaag ctatagggcc tgaatcagaa gggacgacgt ggtcacatgg 240  
 aattgcctgt aaccttacac gggatattct ttacccatgg ttgatcaata ggggctggac 300  
 tctgctctga gccaccctc agtgtggctt cattattggt catccctatg tcaataacac 360  
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<210> 395  
 <211> 495  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA955540

<400> 395  
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 ctgactcct ccatttagaa aataggaacc acggtttcat taagctgtgg ctcttttcc 180  
 ttttaacctaa gcttagttta aggaaaactt cctcgtaca attatgtaac taactttaat 240  
 caatacatag taattatgca agcctcaata cagtagctaa ctttttgaaa atgacttaac 300  
 acaaaactatt acaactacc ttctttgaaa atttctctat gcaagtatca gaacagattt 360  
 acttctcttt taattttcat ttcctatttt ttgggtatgc cttagaaaag taaaattaca 420  
 tataaacatt gtcaactact ttatttgtaa agtcaagata atggattatc tcctctaagt 480  
 aattaaattt tgcaa 495

<210> 396  
 <211> 387  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA955564

<400> 396  
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 gctttctggg ggaacgcatg gcagtcacac gacaaaatac aaaactaggg ggctctgtct 180  
 tctcatatcat catacaatat tcaagtattt tttttatgta caaagagcta ctctatctga 240  
 aaaaaataaa aaaataaatg agacaagata gtttatgcac cctaggaaga atggggcaggt 300  
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387

<210> 397

<211> 348

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA955729

<400> 397

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gcaaagtatg actgatttca agtgagtttt aattaaacgt ttaagactac agatcaagaa 180
ttgtttgttt tccagtcata tggtcgtttg agattaaaaa acaagtgtaa aacagggttaa 240
agtttagattc accccaatga tttattccac aagtccaatt gatagaattt caagcacgat 300
gtctagaact caggaccaag ggacaacccat agaatcattt tacctttg 348
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<210> 398

<211> 445

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA955927

<400> 398

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agttagtgaa cccaccacgt gtgcacatac tcaaagccaa actgaatttc agtttgaggt 180
aaggaatgtg accagggact aaaatgggtg cctagattgg tcaggaaaaat agcccagttc 240
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aatttggtca caaacctctg tgccg 445
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<210> 399

<211> 306

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA955986

<400> 399

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tgaggtagaa cgtggctgtc ccgctgtact gctcctgtat gtgatgcatg acaagggggg 240
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tgccgt 306
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<210> 400

<211> 392

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA956170

<400> 400

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tggacctgca cccacatagc actgtcactg tgaagatcac agaagaccaa caacctccag 180
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cacagaagct catcctcacg gaaccaaaga gcgatctctc tctgagcact ttccaccgaa 300
tactgccat gaatcacatt cttgccaacc tccacacaga aatcaccacg gatcgtaccg 360
ggcgtggcgt cccctgggtc agtggccctt at 392
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<210> 401

<211> 283

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA956247

<400> 401

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tgcttcgctg tttttacttt ctaaagagga aattaaggag gagtaacaca agaaatttca 180
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<210> 402

<211> 501

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA956278

<400> 402

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accctcctc ttacatagct gcctctgatg ggacaaagct tggggtatag catttaaaaa 360
ctccacacc ccattttatc aaaaccaaag agaacaaaaa atttcccttc cccccacaaa 420
acccaaatat atatatatac tttttcttaa aaaaaaaaat tccaaggcat taaagcgtaa 480
aagtgaatcc agaacaagag a 501
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<210> 403

<211> 379

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA956301

<400> 403

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gctgaaggct tcacaccgta atgctcaaga gtgatatcaa ggggaaagggt gtatgtaagt 180
gcttctatct ccacagacag aagatgcgaa gtaaacaaaa tagaatggat ttaacaccag 240
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gtgttccac ggggaaaaga cgactttaaa gctcatcagt tgggtagaag acaacagagt 300  
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tggaatgccg acgagagca 379

<210> 404  
<211> 426  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA956431

<400> 404  
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tcttcaaaagt gtttcccttt aacggaaact tcattttata gaatctaaac attaaagggtt 180  
tgaaaaaacac aaagccagaa tccagcataa gtcaaggaaa tccactcata cttcaggccc 240  
ttctctctca ggaaccagca ttgttatatt atttccattt agtagaattt gatctaattt 300  
tgtaattctt ctctctcttg gtgtaatttc aaactctgtg acatcttcca acaccatatt 360  
gacaaagtca tcaaatecta aaagtgtacc cagattttct ttatcactct tcatcacaat 420  
gtgaat 426

<210> 405  
<211> 446  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA956723

<220>  
<221> unsure  
<222> (1)..(446)  
<223> n = a or c or g or t

<400> 405  
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acatggcccc ctcagcttac acagcccagg cccacgtgct tagggacgga accaggcgca 180  
ggccaatctg aaatcctggc atttgggagt gggaaggaat atcaggaagt cgccatcttt 240  
ggttacatag caagtgtgaa gcgagattgt tgcaaatgag atcctgtgtc aattcctcct 300  
ctctctcttc caagggaat tacatcccga aatcacgtga gcattanggg tcatccccct 360  
gttctgtgcc tgggcggatc ttccggtgtt tctctccata gctacagtgc ctttgtttca 420  
gtctacaaac tggtacacag taactg 446

<210> 406  
<211> 425  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA956864

<400> 406  
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acaagagttt ggggctgaac aacagagctc tgggaaggca ggagcctcct agatagcaaa 180  
gggaatgtgc ttggagtttc acttcggtcc cagaatgaga cccagcagtg tctcccagaa 240

ctcgggctga tccagtatac tgccctcttca ttctccacca ctgacagaga taggccaggc 300  
cccagaccac agtaaaaaca attgatcccc agagggttaga gctactccct acccccgacc 360  
cctggcacat acacagattt ttggcagtgt tggactgggg aggagtaagc ctcagctcca 420  
ccagg 425

<210> 407

<211> 540

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA956910

<400> 407

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tgatgggtcc tcacaggcat gaaccaccaa ttcgagccca ttcttcaagt ccacttcca 180  
gccatctgca gctgtgggga gcccaggaaa gacacttcaa gtggaatgaa tctcaaacac 240  
cttctcctct ggcagcgtgt aaggggccag aggatgtaca tcaaaagctt aagacaatta 300  
aaatattaag tgccacagga aaggatcaat gataagcagg agctgtagtt ctcaagtagg 360  
aagctactat ttacacaacc tcacaaccta aacaaatata agacgaagag ggctgggcag 420  
cacggcttca tttgctcccc tcctcgcttc tgataaacac ctcgaaatgg agaccgccga 480  
gctgacagca aacgttctat ggagagaatg ggggtggggtg cgagtggggg cacacgcaca 540

<210> 408

<211> 386

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA957003

<400> 408

tttttttttt tttttttaag atatgacgac tttattctgt aaacatatcc aagggcccaa 60  
ccccaggcca aaagctctgt tacccttctgt ggctgtcttt atgaactgcc aagcccaccc 120  
ttatcaccaa cacaaggaac tcttcgaagt taattgcgtt gtcactattg acgtccaatt 180  
ctttgaacaa gctttcggtg tttttattct gcacaaactg agggcactca gtagtgacca 240  
ttttcctgaa gtcacccctg taaagggcat ggtgattccc ttttatacca aaataattgt 300  
ggtaaacttc aatgacgttg ctcaaggcct tctccaattc aattgccatt gtcgataaaa 360  
atttcctttc acacaaggtc tgacc 386

<210> 409

<211> 421

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA957071

<220>

<221> unsure

<222> (1)..(421)

<223> n = a or c or g or t

<400> 409

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tgtgtgcagc agttcaaaga agagggtggaa aaaggagaga ctcgattttg tcttccgtac 120

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aggatggacg tggagaaagg caagattgaa gacactggag gcagtggcgg ctcctattcc 180
atcaaaaccc agtttaactc tgaggagcag tggacaaagg cgctcaagtt catgctgacg 240
aatctcaagt ggggtcttgc ttgggtgtcc tcacagttct ataacaagtg acttgctcct 300
tacgggatat ttgcctttta ggttttacat tttgtttggt ttggaaagat gctttaaatt 360
aaatttggtt aatattaaac cacatgttta caatanaana aaaaaaaaaa acctcgtgcc 420
g                                                                 421
```

```
<210> 410
<211> 392
<212> DNA
<213> Rattus norvegicus
```

```
<220>
<223> Genbank Accession No. AA957202
```

```
<400> 410
tttttttttt tttttttcac atttcatcta tttactgtgg atgtcactgt caccatccca 60
gccactggga ggggcacacg gctttaaccc ctgtgtgcgg agggcaaggg tgaggcatct 120
gagattacaa aactggctat gtacatgggg catcctgggt ttgagtcgtc tgtgcacaca 180
tagtgggcat aggaagtctg ggggtctaaag ctcaagcagg gataggggtga gcgtagactg 240
gggcacccca ccaggtagag cgtccccaa ccctcaagca tcatcaccat ggagaccagg 300
ctccaggga accccctagg tttctccata gagacagatt ggcacttagg gatcgccaca 360
aatgggccac tgcgatttct acaaagacag at                                                                 392
```

```
<210> 411
<211> 265
<212> DNA
<213> Rattus norvegicus
```

```
<220>
<223> Genbank Accession No. AA957335
```

```
<400> 411
tttttttttt tttttttaaa aaggtttctg taaatatttt attttccata ttttagaatc 60
agaaagaagc atgtggtaat aaaaataata gagaattatt ttcttcagat agtcccgtc 120
tgctgcgaac cgccagcccc tccagtccag ccccttcag ccagctctca ccaggcctcg 180
cggctctctc atgagcagcc gctgaccggt tatcagtcct actatgtaca gatataattac 240
aaggcaaaaa gaaagcctcg tgccg                                                                 265
```

```
<210> 412
<211> 557
<212> DNA
<213> Rattus norvegicus
```

```
<220>
<223> Genbank Accession No. AA957410
```

```
<220>
<221> unsure
<222> (1)..(557)
<223> n = a or c or g or t
```

```
<400> 412
tttttttttt tttttttgtc ataatacttt tttttattac aatattcaaa aaactgggta 60
tgcaagttta ggggatccca agacccttc ttcaattgta ggaatgtgcc atctcaagac 120
tctatagtca aactgtaaa ggtttcagat gtaaaagaaa atgaaaatgt aattttcttca 180
taaagtttct gttactacta atcacatatt ctctgtgaaa ccctgaaaaa tttccctgta 240
aagcaaataa tatatatata atatacacat attatatata tatagtgtgt gtataaagta 300
```

```

ttggtagctc cccctcccaa gagatcagct gttttcctta atcatctctt attagtgtcg 360
acaaacagct aagatacata ttacttttgag aattaaatac ataattgtga aattcaaaca 420
agccaaaggg caaaagcact atgtggatgg cacacctgng gtacatcacc agagtatctt 480
tctttctgcg ttgccacctc cctcttttgc agactgactc tcacaaaaac cctcttttat 540
tgcaagcaca gcctcca                                     557

```

<210> 413  
 <211> 454  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AA957433

```

<400> 413
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tcaacagttt cctaaagtgg acaccactct gttagcttac agaacaggaa gctgcagccc 120
agggaggtcg agcgactctc tcaagattat ggtgctcata aatggagcca aggatgccag 180
ccaccgtgct gccatgctgc cctcggaact ggagccattg gttactcttc tcgttgctat 240
gacgatatac ctgacaaagg caactcaagg aggggaaggt ttctttggat gacagctcag 300
gaatacagtc cgttggtgta ggagaggtgt ggctgcaaga gcaaggaagc tcacattgca 360
tccataatca ggaaccagag aacagggagt gctatgctgt gtcacaaaaa gctcagccag 420
ataaaagtgc tcagccaaaa ccaaaaaaaaa aaat                                     454

```

<210> 414  
 <211> 337  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AA957452

```

<400> 414
tttttttttt tttttttcac gttctgctca ttctgtcggt ttattatcca attgtccggt 60
acagtccag tcgctttaca gaaccaaccg tttccaccgc tgacactatt gtaaaccaca 120
tcggcgagtt atacagaaag ctctgcgttt caaaaaacta gacgctttag taacaatatt 180
acaaaggctt tagcttcaaa aataaccgaa aatgaaaaaa ataaactttt aaagaattag 240
catcataaaa ttaatttatt ccaagtaaaa atacaaaaata atattatgac gttgaccaga 300
tatgaaagtc cctccagaa acaactctag taatgat                                     337

```

<210> 415  
 <211> 555  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AA957708

```

<400> 415
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actagatctt gcaaaatatg ctctgaccaa ctttctgaaa ttaaaaatgc ataaccacat 120
ctgtaagatt tttaatgaac aaaagagtta aatacaaaact ttcatatgca aaatagatga 180
ctgtaaaccc ggcaacctca gagccgagca cgaatctctg cgaaggctca gtggggctgg 240
agtagagcat gctgctgagc cagacttaat tcagcttcat atatatTTaa aaaaactctg 300
aggaaaaata ggcttaaatt gaggagcatc tcctgaaata cagctcaagc cagcccttac 360
cactgtgagc gcaggctcac caacctcggg tttgacattt atggtcacag ttactttgaa 420
tccagtttca tgaggaagcc aagctacttc agttctagag aagaaagtct tgaagatgag 480
tgtgccctgc tgtgaagact cacggaccac gttccttggc cactttccat gaactgtgcc 540

```

555

<220>  
<223> Genbank Accession No. AA957906

<400>	416						
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gtcaagtaac	aaacgctcca	gggagtttcc	tatagatata	aattatgcaa	atatccattt	180	
atatcttcat	ttacaataat	caataaataa	gagcgcatat	tcgtaacatt	tttttacaaa	240	
gatccctttg	ttttttttat	aaagctataa	ctatgcacag	ctaaatatag	aaaataagcc	300	
ttgtaccaca	aaataacatt	ttgcttttgt	ctccaaccgt	tctgcaactt	tcaggcacaa	360	
gccacgaggt	cctcccaactg	tgccattaag	aaaacatcaa	gtctgtcaac	tatatcccag	420	
gccaaaagac	aatgagacac	cggtcagtct	tccaagggtg	tactctgaac	agcgtcctgt	480	
atccaggcct	aacaacc					497	

<220>  
<223> Genbank Accession No. AA963369

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<220>
<221> unsure
<222> (1) .. (525)
<223> n = a or c or g or t
```

<400>	417						
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tatccttctt	taaatttttt	tgcgttttta	aagttttttt	tacaaaagagc	ccttatgata	180	
atggtcactt	ccattgtact	gtcattccacc	taacagcagt	agagatccca	ggagtagcac	240	
ccaaaactca	ggtgccccac	agaggacaga	agcaacagca	gaataatatg	ctgagcagta	300	
caaaaanaaaa	aatcagacaa	aaaaacaaaa	cctcaccaca	caattgtacc	tgagtgcacat	360	
aaaccggtaa	aagtgtgact	ttgctttttc	atttttctct	tctttttggt	ctttgggtctg	420	
ataagaaaat	gaacagtttt	gcggtgtggca	agtcaggtaa	taaagatcag	tctccagttc	480	
agaaccctaa	atcacacctt	caagqctqct	qcagcactgt	ttcct		525	

<220>  
<223> Genbank Accession No. AA963372

<400> 418							
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ttacaacttgg	ttctcagggca	ggaatatgga	gggccacctc	ccgaggccgc	cccagggagc	120	
ccagccctcc	tggggagaaa	gtagcttccc	cgtgctccaa	ggactaagcc	ttctctcaac	180	
ccaccgccaa	ctctcgtgtcc	caqqccccaa	cgcttcttqq	taggcctctc	tqgaagtcaq	240	





<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA964181

<400> 422  
tttttttttt tttttttaag aaagtatttg gaaataaagt cagatggaaa attcattttt 60  
aaaattccca ttttgtcact ttctctgata aaatatggcc atatctcccc tatttagccc 120  
tatatatcat tccagtgtcc ctttccagac tggactgagg aaataggaat tggtttcatg 180  
cctgaggctg ttagactttg gaggtggcat agcctttctc acctggactg cagggcctgg 240  
ctctaagtca cagtgtctct ttctccacac tgttatccaa g 281

<210> 423  
<211> 531  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA964275

<400> 423  
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tccaccacag aggtgctaata gtgtgttgtt ctctagaaga ggtaagtggg tgtctgtgtg 180  
gccatccgca aaggggacag aatggacggg cttgtaggat ccaagtctga aacgacagca 240  
aattatttcc actataaatt ttccaattcc atgtaacatg cctgttgttg aaaagattcc 300  
tccaataata ccacagagtc ttacaaaaaa ctgccagaaa ggcatgtgtt cctcagtgc 360  
tgtcaccatg tgagaactga gatcgtattt cataaatatt ccagagacgc cgtggctgcc 420  
tgcagcatgg ttgatgatgc gttccctttc tgtcacagag aactgatggg tatctgcgga 480  
aatcttgtat gtgtgtagct ttgttggcac aactgtaatg aaatattgga a 531

<210> 424  
<211> 458  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA964302

<400> 424  
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cgtgggccgt gtatgtgagt cagtttaggg gtccaggcca gcccctgcta gacgccacta 120  
cagctcagag tgggtgtcgg ctgcctcaga tatgagctgc aaggctgccc ttggtgctgg 180  
tagggcgctg gcctgattgc tgtgagctag gtgggatgat gcccaaactg ccctggggac 240  
agtaggcacc gactacctgg gaccatggct gggttgtgtg catccagcca ttcatgtgtg 300  
caggctgtgg ctccctggcac actgcacagc tggaagatca cattgactgt ccttgtgtcg 360  
gctgccgaat caggtgaagc actgagctgg gggtaacagg ggtacagggc ttgttgggct 420  
gcgtacttct gtctcacact cgtgcattca ttccctgg 458

<210> 425  
<211> 438  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA964336

<400> 425  
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 gcatgctaaa tccaattatg tggtaggaat gacatgtaga atcacagtag cgtccacccg 180  
 tggctcacac agttcaattc atcagaactg tgctcagtag ccagggtgctg aattattgca 240  
 caagcttgcg ggcccagcac gttccctcca ggcagcgagg tctcctgcct cattctagca 300  
 tcaggaccag aaagtcagta ccagatttta cagtcacatt tatggaatcc ataacaaact 360  
 taattttactt gtctaccaac ctactctcgt tagagggtccg cagatgcact aattggtaac 420  
 cttcattatt atactcac 438

<210> 426  
 <211> 363  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA964368

<400> 426  
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 gttacacgat gagagcaaca cttcattttc cacctcctag gaaaatattg gttagataag 180  
 gcaaaggacg ggcagctact gaacgggtgat attaacatg caagaacaac acataggtgt 240  
 gcaataaaca tcattgctaa atcttgggtt gaataggcaa gggataaaat ggatttcagc 300  
 caagaatttg taacaattaa tgcaaaaagat tttaaagaat gtctttagc tacctttaca 360  
 tta 363

<210> 427  
 <211> 477  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA964379

<400> 427  
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 ggggctctac acttcagcga cagcgtataa ttgggggttc ctggctggat ccgcagctct 180  
 gccaaaatcc aaatgccatt agtgagcttc agggactggg acagcatgtc ctgcccctcc 240  
 acattcctct tggcgatagt gtaaaccatt ttgttttgca acttgctgga aactgtgtca 300  
 gcgtttaaat gacactcctt aatctgaaat tggagctcat tttcattggg aatctccttc 360  
 cacgtcgcaa ggaagacctg gcgttccatt ttgccatctt ctacaaaaag cacattgagt 420  
 gggatgaggg agctgaagta gaagacatca atattgtttt taacagccac ctgcaag 477

<210> 428  
 <211> 498  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA964455

<220>  
 <221> unsure  
 <222> (1)..(498)  
 <223> n = a or c or g or t

<400> 428  
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 caagacatac atgtgagcac aaggagctta gccatggata gacgtgtctg tggacagggg 120  
 cactgcagga accatcgac ttaagctcgt gtgagaccca ggcagctctc gtcatgttcc 180  
 cttggcttaa ggagaggtag atcatcagca ggaaggtana gaggacgctc ttcaacagag 240  
 tagccgagga caggggtctg tctgatacga acatccgcag ggtgctagca ggagcacacc 300  
 tgtcatacag cctgccc aaa acggccacta gcatcttctc ccaaaacatc tcagggactg 360  
 gcaaggggca agcgtgacag aacttgata gatgtttcta gaaagcagtt catttcacag 420  
 aacctgctta acgggacagg acgcccttct aacggacctc tgcacacact agaactag 480  
 agcactgtcc gcctcatc 498

<210> 429  
 <211> 367  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA964514

<400> 429  
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 cagtcctgac agtgtgttaa aaatcacctt ttaaaaagac catgtagaca ttctgtattg 120  
 ccagaggcca gggagtcac ttggtgaggg gagtcccggc acggccacct cattcattag 180  
 tcaaagcagt cctgaggtgt atacctgggg tctcttccag gggctcttggc tttcacaagc 240  
 acttagttcc atttgatctc ggcattgcct tatacacagg agctctatca cgtgttactt 300  
 cagagtgagt acagggcctc gggtagcctc gagcgcttctc tggaatctgg aattggccct 360  
 cgtgccg 367

<210> 430  
 <211> 537  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA964688

<220>  
 <221> unsure  
 <222> (1) .. (537)  
 <223> n = a or c or g or t

<400> 430  
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 aaccagcag ttgggaaatt acataattat gtagagttg gtagatgtg gtaaaagcag 120  
 ccacatctgg gccagctctg gactcgagtt acaagatact ggttcctgtt agttatagtg 180  
 acaaaagcag tcattaaatt cttgagattt agacatctcc tgtaaaaaaa atcagatttg 240  
 ctaaaaatgg agagagtcca agtgacgtac tgccagggtg caacagtgtt agcactcaac 300  
 aggaagtcca tgccaaaaaa atctttttta aggcatagtc tcactttgta ctgctggctg 360  
 cacctttcct ggcactgcct tagcgaccag gtcttgngga aaacgttccc gctggggacc 420  
 tgaccaactg gcaaaccagt gaagaacaca cttcatctcc tgggaagtga tgtaagacat 480  
 tggagggggg gaagagttgg caatgtcatc aggcactgag ggtaacacgg aagggaa 537

<210> 431  
 <211> 437  
 <212> DNA  
 <213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA964752

<220>

<221> unsure

<222> (1)..(437)

<223> n = a or c or g or t

<400> 431

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gttcatgata catacttttc tgcaagaagg caatgaatga aataaaggca tagaggggaa 120
attgggggaaa aaccacaatg tagtaggatg tcacttaatt aaactcgtac ttgattggct 180
agttgtttta gttacaattt caagtcttat agatacagaa ttctactttt tttccagaac 240
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tacttctaag gagaacagtc aacattgtta cttcttgtcc ttcacagtct ggaattcatg 360
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<210> 432

<211> 404

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA964892

<400> 432

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aacgaagcgg ggtgtgttta cgcaaatccc tgtaaggcac tttacggttt tcatagtggg 180
cagtgaaggta cataggatat aattctaggg ttcgttgctg ttaacaatac aaaaggaggg 240
gagaggaggga caaggaggga gtagcaccat gttgtgacgg cggcagaggg gggcatcact 300
atgttcttct catgcacact tggcagcggc tgacatgcgt gcgcagctcc cctgccttca 360
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<210> 433

<211> 380

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA965031

<400> 433

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aacacttata gtcatacaaaa atagtgaata aaaaatgcct ttgaaaacct ggaaaaaaaa 180
ctaaaaaaga gaacaagaaa ggtcacggca ggtcagctc cccacaggca ctgggtggcca 240
ctgtggccag gccctcgggtg gccacagcag cctgtctccc gagcaaaggg agcccacaat 300
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<210> 434

<211> 201

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA965075

<400> 434  
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 tggtttttctc ctgtttttctc tggcctcacc cctgctgcca gtctcctttg atcctgttgc 180  
 tctggtgtgt cgggtgtga c 201

<210> 435  
 <211> 498  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA965122

<220>  
 <221> unsure  
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 <223> n = a or c or g or t

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 ctcttggaat tagtagatgc acactgctca ggcaggtag actggagaag caatttcacg 180  
 ataaacccta cagaatgaga aatgtacaaa gttgttgggt ggctgctggc ctcttgccctc 240  
 cccatggggg tcaggggttac acccatcagt cctgcacaaa ggtcctgnag ttgacctgng 300  
 gagctgcaaa atcttccctg ngggacaaga acagtcttgc tcacccagca gatgtgcca 360  
 cgaataggca catgggtgtg tgcccagttg ctgtggtttc cccctcaggt tccatagctc 420  
 ctccaggtgtg tcttctctct gctctatgt cctccctta aagggtgttca tacaggtgta 480  
 agtccccgag aacctgtg 498

<210> 436  
 <211> 519  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA965190

<220>  
 <221> unsure  
 <222> (1) .. (519)  
 <223> n = a or c or g or t

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 atgcccacta gatcatcaca atgcaaggaa ggcggaagg aggagatagg gccagggggg 180  
 gaaagcagta aaaagcttag atttcaatta agggctggta agtccctttt ctcttcaagt 240  
 atcacgcatg tgtaccaa ataatcagta attaaaggcc atttcttccc acacccacag 300  
 ccgagtaatt gctaaaccaa gagccctggc cactcctcag gtgagcaaaa tgctgcacac 360  
 catggctccc caagggccat cacaccatcc aattcctaaa gagctggcca aggtgttcag 420  
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 tcagaaatga gttggtttcc ctcgtgccga attcttggc 519

<210> 437  
 <211> 414  
 <212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA996451

<400> 437

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cagtgggtgtg cgggtgctagt gagaagaccc agcatgggct gccgtcctgg tgggggcctg 180
accaccgcac cctccgttca ccacactgcc tgaaacagta ccgtgagca cacgtggccc 240
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gcacttcatt tgccaatgag actatgctac tgtcaggcta ccctacctag cctaaagagc 360
cccaacagcc tgcaatttaa agtatctttc ccttcctcct tcaaggtagc actg      414
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<210> 438

<211> 258

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA996727

<400> 438

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cagtcggtca agcaggacat agatgcggag ccctttttcaa atgacacagt tattctgaaa 180
gtttaagggt ctacaggaac atacaaccaa ggacttcatt gtggagagga gaccagattc 240
aaatctgcct tcccgggt      258
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<210> 439

<211> 203

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA996782

<400> 439

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catcttataa aagaaaggat ctgtagaagc tgagcaatgt gtgcagtgcg ggcggctccc 180
agtagaagtg ccactccggt aac      203
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<210> 440

<211> 440

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA996883

<220>

<221> unsure

<222> (1)..(440)

<223> n = a or c or g or t

<400> 440

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aggcaccagt gtgagggcat ttcattgtcca gaggtgagcg taaggcagga tggggagccg 180  
tctagtacct ctgctggacg gtagaaccac cagcatggca aacacagtca gaggtcagag 240  
gaggaagaag gaggactggg ggtggcgtca tggggcaatt tgcccactga tgtgccacat 300  
ccttagtcct tctaggcaaa ggganaggta acatgttcca tatcgaagtc cacagcagct 360  
aaccgcattt gaccttggga attctaggct ggacttggtg ggggtggaat agcacagttt 420  
taccactgc tttgactgca 440

<210> 441

<211> 158

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA997009

<400> 441

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<210> 442

<211> 513

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA997048

<400> 442

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taacctttga ggaaaagagg agcctccacc cacttcatct caggggagcg tctacttcta 180  
gtgcaaagta tgtgaggtc cagccttcta tgcccggtgca tcttgctaca ccttagccaa 240  
gctcctagtt aaccacgaaa gcaggaaaat tgaaattatt ctgggttttt gggctttaca 300  
atttaaata caacatctct aaaaagatag gtcaactcta atgcttctaa agtgattttt 360  
tctttctttc ttttttttgc gagctgggga ccgaaccag ggccttggtc ttcctaggca 420  
agcgctctac cactgagcta aatccccaac cccttttttt ttttgctttt ttaaggtttg 480  
tttttaaccg ttgtgtatgt gtacgtgtgg agg 513

<210> 443

<211> 436

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA997068

<220>

<221> unsure

<222> (1) .. (436)

<223> n = a or c or g or t

<400> 443

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attatttgat aagttcattc aatataattt aaaataaact aaaatttgca gtacaaaaat 180  
aaaactaata ctgttttagc tcgtcttttg agtctatacg gtcaattttg agtcaagttg 240



atcaccattt ttttctttat aaggttcttt anaaagagct gttctgcagt cagattgtga 300  
 tacgcattct tcttcatcaa agacatgggtg gcattcccat agtagtgtaa aggactgtct 360  
 ggtgtgtaaa agttgtactt aaaaccagca aggtgcactt cactgcatat gtgaaacgcc 420  
 aaggtgagag cgataa 436

<210> 444  
 <211> 396  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA997237

<220>  
 <221> unsure  
 <222> (1) .. (396)  
 <223> n = a or c or g or t

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 agctcaacat aaacttgtgc tgtgaacagg taccgcccc gtcgacacat acagtcacgc 180  
 ggctcttaag agggaaagca cacatgggtg ggttgcagaa aggacagagg tanggaagcg 240  
 ttctcacta gacacaacac accatattgt ttttccaaaa cacacacgat acattagagt 300  
 gaggtggtgt ccttcagaac agggaggagt tgaagtgtgg gcctccctca acccatgtgc 360  
 cacccaaggg ctgggtgtgt gatgggtcacg agattc 396

<210> 445  
 <211> 221  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA997323

<400> 445  
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 gatcatgtcg ctgccttccc cctctgcaac cctaagccag tccatgccac cggatgtata 180  
 tcacgcactt taaaaaaca tcctgaagcc taatcaaata g 221

<210> 446  
 <211> 468  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA997345

<220>  
 <221> unsure  
 <222> (1) .. (468)  
 <223> n = a or c or g or t

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 tgtcgatggg ctattagaac catgaaagtt agtgttcctg tgaatgtaag ttttctcaga 120  
 cagctaggac cagccacca caaggtacgc gtggaaccaa agtgcttaga ggcttcggat 180



<400> 449  
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 ctcaggttct gtagaggtga tacctaaagg gtgctgctgg cacaccctc ccatctgtca 180  
 cctctagtgc caggctctaa gaatccacca cttgcagaga ggcggtgacc cagaggaccc 240  
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 tttccacag aagcctcctg ctgactcca 329

<210> 450  
 <211> 460  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA997699

<400> 450  
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 agactaatac actgacattc aaggaaagca cttctttaca ctgtcacatc ttggcatagg 120  
 ttatgccaag taccagaaca ttccttttta cctgtcataa gtagtgggta acagtgggga 180  
 tagatccttc caccttagga acgtcatggt catgtcaca tacacctggg ttagatggag 240  
 caccaaaatt ccagaggaca tcctaccac gttctcaatc tcctttcccc atgaggtcct 300  
 gacggacttt tccaccaatc aaatccgaga tgctctaaac ctcaatactt ctattcagtt 360  
 ggggtgcaatg gggctgacat ggaagatccc tcatctcaat ttacaacttt aggactaaac 420  
 aacgttgagt agggtaggtg aatgacatcc gaaatcaagc 460

<210> 451  
 <211> 484  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA997711

<400> 451  
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 aacatggatg ggccagctct ctaatagatg gcctacacgc ccacagatga gcaggaggaa 180  
 ccatgtccag ttatgctgag aggtcacttt taccttcaca agtacaacag ccccccacagt 240  
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 tccctatggg gccggatcca ggcaccacgc agttccagaa acaatagtgg ttgactgcca 360  
 aattctagaa acaaaattag gagcaggatg ttacattgtc tttctgtagg ttaaaagaaa 420  
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 catc 484

<210> 452  
 <211> 491  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA997721

<400> 452  
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 tacggttcgt gtcacaaact gcattgctgg gcagtttccg ttccatatgc tgtgccagca 180

ttaaaccacca cacagatata aaactattgt aaataaaaaca ttccagccag gactggcata 240  
aatttatata tatatttata ttttatatat atttatatca ttccgaatca gctaacaatg 300  
aatgtcatcc ttagtcaaaa ctcagagtcc tgctaatactg aggctacat ggtccaaata 360  
caacagcctt acacctccca tacaatattt aaaatatatt tagctttcaa atgcatttat 420  
aaggtacatc catagtgaga aaataaagtc ttaaaactta aatacaaaag tcaccaagta 480  
aaaacttgaa g 491

<210> 453  
<211> 425  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA997746

<400> 453  
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ttgagctttt ccaagtacac gtgcagggac ttctggatgg agtctctgga gatgaaactg 180  
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atcatgctct tcgtcagctg ccgagaatgg tctgaagaaa atgggggttac ttatgaaacc 300  
cacctgtgga gtatttgggg ccatttccca ctctttgccca catgttcttc aagtactgag 360  
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ggcta 425

<210> 454  
<211> 422  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA997763

<400> 454  
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ctcagggcga ccaggacccc ggtgaggagg tgtgcttca tttctaaagt gcatgcttcc 180  
cccacccggg cgccggcgcg gcctctccgc ccgcccacga ggaggtcagg aggtgagaga 240  
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ggtggcctgg actcggctgt acagactgaa ggacttcagt tccagccaga gaaacccaaa 360  
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gc 422

<210> 455  
<211> 370  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AA997765

<400> 455  
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ggaggatcac tttgttgtga catcatgaca ttaaccctg gttggcagga atgacggaga 180  
gcggttttgg catattgcac aggcggcgtg atggaggctg cgctgggtgat cctctgggtg 240  
ctgaggccgt ttccttgtcc tccccaacct cagtgcacac gcgggccagt ctcagaatcc 300  
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ctcacattaa

370

<210> 456

<211> 351

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA997851

<400> 456

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gatctctggg gaggggctgg gcttcccaa cccacccttc ttgccatctt ctaggccaat 180
gagctgagca cccctcagcc tctgtttccc cgaccaaatt tgtgctagtc aaggtagga 240
ggctcctggg gccagccaga tgcaggtggc tctgggctaa gccaggcgcg tgtcttgagt 300
cctagcctcc caccctgccc agttcatcag cacaggatcc agcttgaagg c 351
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<210> 457

<211> 415

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA997979

<400> 457

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cttttaagtc attaatagtt tttaaacata atacagactt aaaaattggt caacatcaac 180
acaagacccc acccctaagc acagaaatca actccaaatc cagaagtcac agttgtttgt 240
ccctagatgt cctacagcac tgaacttgat ctttatatca ggctaccagc caggaaaagg 300
ccctgaaaga aaccctggg agacagcagc acttctgatt gctgctgcat acctatctac 360
cctgagggca gatgcatctc acgtcaggtc tgtgagactc ggagccacca cctaa 415
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<210> 458

<211> 373

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AA998029

<220>

<221> unsure

<222> (1) .. (373)

<223> n = a or c or g or t

<400> 458

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cctgggtgtc ccaagccaga tatctgccta atggaatctg ctctggagat gaggcacgga 180
gatatgaatc tttgctaaac agatccaatt aagaggccag gcacggtagc actggcctca 240
ggaggccaag gcangaggac tgccatgact ttgagtccag cctgggttac agagtgagac 300
tatctcaaaa taacaacaaa cccaacaaac aataacaaaa aaccaacacg ggggtgggagt 360
gggagagtga gca 373
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<211> 409  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA998207

<400> 459  
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 ccttaagaaa aaccttaaaa gactttatta ctggtacttt ccaattgaac actagcagcc 180  
 caagccttct accttaagtt gaactcttaa aaaaataagt tttaaaacac tctatgctaa 240  
 tatatttaca gtttatatag aaattttcaa taatcaaaat acatctttag caaaaattta 300  
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<210> 460  
 <211> 283  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA998234

<400> 460  
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 ggagctatgg acccgaaatc gaacttcagg aaggttatct aattaatgag ctcttttgga 180  
 tttcctaatt agtagaacc tgtgatcaaa gcaggagacc cagtctccac caatctcctt 240  
 tcaggaagca tataagaaga ctgggctccc tgctcgtgc cgc 283

<210> 461  
 <211> 331  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AA998276

<400> 461  
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<223> Genbank Accession No. AB005900

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<210> 483

<211> 5010

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AF010597

171

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<210> 484

<211> 2261

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AF012714

<400> 484

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<210> 486

<211> 669

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AF016387

<400> 486

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<210> 487

<211> 2225

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AF020618

<400> 487

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<210> 488

<211> 3769

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AF025424

<400> 488

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<210> 489

<211> 6331

<212> DNA

<213> Rattus norvegicus

$\langle 220 \rangle$

<223> Genbank Accession No. AF026505

<220>

<221> unsure

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<223> n = a or c or q or t

<400> 489

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<400> 490

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<213> Rattus norvegicus

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<212> DNA

<213> Rattus norvegicus

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<223> Genbank Accession No. AF072892

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<220>  
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<210> 514

<211> 448

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI008773

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<210> 515

<211> 479

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI008787

<400> 515

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<211> 444

<212> DNA

<213> Rattus norvegicus

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<223> Genbank Accession No. AI008813

<400> 516

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<210> 517

<211> 478

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI008838

<400> 517

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<210> 518

<211> 467

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI008919

<400> 518

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<210> 519

<211> 486

<212> DNA

<213> Rattus norvegicus

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<210> 520

<211> 630

<212> DNA

<213> Rattus norvegicus

<220>

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<210> 521

<211> 458

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI009115

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<210> 522

<211> 358

<212> DNA

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<220>  
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<220>  
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<210> 525  
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<210> 526  
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<212> DNA  
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<220>  
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tttcgattcg ttcagtgtgt gtgtgtgtgt actt 634

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<213> Rattus norvegicus

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<212> DNA

<213> Rattus norvegicus

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<210> 535

<211> 478

<212> DNA

<213> Rattus norvegicus

<220>

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<400> 535



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 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI010660

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 tgcctacttg cattccgcta ggacactgaa aaccagaaa acaaaacaga cagtaaaacta 180  
 cccttgtttc ttatgtatct cagtgcagag acgggggagg gggttggagg gcagagaagg 240  
 gagaccaggc tgaaagagga gcagagggaa gggacgctaa ggggaagcac accaaatcca 300  
 ttagtactat atatatagag atactcgtat atactgcgtt tcttagccta agaagaaact 360  
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<210> 542  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI011471

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taggaaatac gaagacaatc ccacatgtct actgaaactc ttgtgggtgat aacgattggc 180  
cgtgaagaac ggcagtgatc ctggttatga agttcaagtt gtcatacgtg cttaatttgt 240  
tttttttgca tattaatcaa atgctcggcc ttaaaagcac tgctttcttt gcatgcggtg 300  
tttagaaaac tcagaggcca caatccgtca atgtaaaactt actaagatta cttatctttt 360  
tcaaatcggt taaaaacgat tcacctctta tttctgaaga ttaacaacat ct 412

<210> 543  
<211> 661  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI011503

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ctgttttcacg agattattaa tatacatccg ggactgggca ccagtcaatc atatcaacaa 180  
ttcactattt atcaccaa atggtatataca gcaatagcat aaagattaag tatactttat 240  
acgtgatttt ataataagac ttcttggttg gggaatctgt caacaatata aaatataagg 300  
tggacataat ggcagaatat aaaaacacat ttcataagag caataatata cactgttcca 360  
aggacaggca agagcctggt agctcagcgt taggcattgt ccttcaaagg agctgtaggg 420  
gatggaaatg tctggggttg gacaagctca gagacatctt tgggtgtcac agtatgtttg 480  
tttgggacag ccaaaggaca gtggggtagg tgaattgttc tgctgcatcc acttgaggaa 540  
caagaaccaa gttcccttca tggccagggg aatcatgtct gggattccga gtgtaggggc 600  
ctttgaatta ggggccagtt tggacggagg ggcaccagac agcgggaagg gagtcatcct 660  
t 661

<210> 544  
<211> 689  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI011510

<400> 544  
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gttgagaaac aaacagggtga cattttccaat cgtttatctg aaatccacag ggattagctc 180  
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ccaaccactg ggcaccggag tcactactcc ctccagtggc atcacacaga accatgagac 360  
aagtcgctgg cagttcgtta gattaggaat gagaatccag tgcgcccggc acctccctcc 420  
gtggccactt tgagtaggta tctggcattt tctcaggtgg cagtaaatgc gcctcacagt 480  
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agggtagccc ttggtgacag ctataccaac ttcattgcgga cccctggcaa atgtccttga 660  
aaggaaaccc cacatgctct caagccact 689

<210> 545  
 <211> 426  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI011678

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 tcaactgtttt gcacagtttag aggtataacc actacattct cagcctccgt gattgagggc 180  
 attgtgcagc tttggaaggc cccatcattt cctcttaatt ctaaataagg tgaattacgg 240  
 ctataattgg acagaaatta aggccattaa ggattcagac acaacactgt tccaagtgtt 300  
 acttttagttt tgtttgaatg agttctgtga caagcccagg gaaggtgctc aaagtagtca 360  
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 acttcc 426

<210> 546  
 <211> 439  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI011734

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 acaccatctt gctcatgcct gagaaatagg ctttctctct ctcgctcatc acttcgaagt 180  
 gtaagggcct cctgcagaag ttgcattcag ctgacgaatg tggcttcagt tccagccga 240  
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 aaaggcctga gggactcggg ataagaatgg gcatctgcga acgacagtct ccatgtctgc 360  
 aaagtgtccc gggctctgcg cgggctctcg acgagacggc ggtgggcact cgagcggagg 420  
 acgctaaacc gaccagtgc 439

<210> 547  
 <211> 468  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI011746

<400> 547  
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 acctgccgcc ccacctggca cacagggtcaa aagccctttt ggggctggta tcaaatctag 180  
 cttaatcctt cttgctcccc tggtgctggc tggggaactt ttgatgcacc actcggaggg 240  
 tgggtgaaaa attgccaagg aagaggaacg gaagcaggaa ggtgaggcct ttccacatcc 300  
 aagactgaaa gccctccaca gggaggtcca tgggtgtgtca ttcgcccagg gctcacaggc 360  
 ggtaaaggca cccgttctgg tagtaatact gcaaaaactg cacaaaactc tgggtacatgg 420  
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<210> 548  
 <211> 373  
 <212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI011809

<400> 548

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ctacagtgac tggggcctgg tgtccacaga aaccttaaga gggtagctga cagttaatgc 180
tggtagagac tcgaggccag accagggcca acagacaggg ctatacttct ctgcctaaaa 240
atgtggaagg ttgcatgtgt acagttctcc aagttcgaaa ctacatctgg tgctacccat 300
cactgctaag ggttactcca tcttggccgg gacgagcgcc tcgggggtcag aactcaggaa 360
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<210> 549

<211> 511

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI012085

<400> 549

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cgtcctcagt accaccactc tctagcccat cccatacccc ttctactgct tgtgtgggac 180
tgaacacagt tcacagccca agaggttagc aggtccttag tccagctttg agtgggaagg 240
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ctgggctcca catagtctcc tgggaagaat ccagtgcctt ctgagctgac acccttacac 360
cagccatctg agtagcgctg agtgacacag atgacgggtt cttcagaaaa ggagagctca 420
ttgtccttct gccgggtgta tgggtacagc gtcaccactt tctccaagta ggcagcagg 480
accagctgg gctcatccgg tccaaaacct g                                     511
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<210> 550

<211> 322

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI012130

<400> 550

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tgttttcagt gaaactgccc ttagctagaa ctgctgaggg gagagagagg tgaaggcagg 180
tcgcagagga aaaggagcag aggccagata caggaagaac agacctgtt aatgacacag 240
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tgagggtggg accagagggg ac                                     322
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<210> 551

<211> 484

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI012174

<400> 551



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gttccccgggg ctcaatcata tttctcttct ggaagctttt gaacctgtct cggagaatgt 180  
taccttctgg cttcagtttc ctgagtgaag cagatagctc agagctgagc tgcacatcaa 240  
tgtcagggggc ctggtacttg agccgtccca gccttcggggg tttgtcagcc tctgccagtc 300  
gccgtatgag ccgctgctcc ttccggcggtg ccagctctgc cagcctccgg gccacctggg 360  
ccttgatccc acgtagcctg aagagttctt ggtgctgaag ccgggctgac ctcagtgcag 420  
cctgctgcac ccgcagcttg cgagcagcct tctcccgccg ccgctgctgc tctgtcttct 480  
tctc 484

<210> 552

<211> 398

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI012177

<400> 552

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accttcatgg agaccgcagg cttggaaaac aaccacagag ggaagggatg ggaaaaatgg 300  
ctgcccagga gtcttctcca ccctggctta tcagacccca tccctatcac acagcccctt 360  
caaccacttg aaaatggagc aaacagaggg agcaaaaat 398

<210> 553

<211> 385

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI012215

<400> 553

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ccttcgagaa gagacctggc ttctagaagg gattttccat aatcctacat aacagaggag 180  
agccctgtcc tctatgacaa ccaggacttg acaccgtcga cccggtcctc cagctctgag 240  
tccacgtctg agtcaccctc aagttttatc tttcttttct gacattttgt caccatatcc 300  
tgcaaaactgt tgacaaaagtc ctcattctca tcaactctcca tctcatcctc aatggcggct 360  
tgcaagtccc caatgcggtt gaacg 385

<210> 554

<211> 636

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI012235

<400> 554

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tttttttcca acattttctt tggtgagcaa aagcaattta ttttaaaaat ctatccagat 180  
tattgtcact gataaaacag ataaagccag atgtacagga aatacacatc tttagccctt 240  
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cgtttctaca gcgtagaaat gtttgcaggg cacctcatga atgctaaatc tttttaaatg 360  
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gggaaagggg tggtatttcc atgaaaaatt ccttgagtaa tgtttttcta cactagatgc 480  
ttctgaatcc aaccagcggg cgggcgggat tccagtaaca atgtgtccat tgtaaccata 540  
gacgataact cggagtgtgc acacacagag acacatgact cttegagata aatattttca 600  
tagccaagca gaatacttta gaggtatccg acctcc 636

<210> 555  
<211> 636  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI012356

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gagagcaatg actgcctcga agcagaaggc tgggggtggc aaggcaagca gtttgtcttg 480  
gagacaatgt cctcactgcc cttaattcag acactggtta actggagaaa aacaattcca 540  
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aaggagggct tgccttgaac cactcagtgt tcaagt 636

<210> 556  
<211> 523  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI012498

<220>  
<221> unsure  
<222> (1)..(523)  
<223> n = a or c or g or t

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ccccaggac aagagccccg gaagcatggc tggcgtagg cataaagaca agaggccaca 180  
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gttcaaagag cagcatggca agctgggtgc gggagccaag gcctcaagca gctctggcga 480  
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<210> 557  
<211> 610  
<212> DNA  
<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI012574

<400> 557

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<210> 558

<211> 631

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI012589

<400> 558

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atatccacca aggcagcctc cttctggtct ttcccataaa gccctaaaga ggcacccagg 480
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<210> 559

<211> 467

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI012747

<220>

<221> unsure

<222> (1) .. (467)

<223> n = a or c or g or t

<400> 559

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gccctagtga tgacagttga gccctgacg aggtttaacc tggcccagggt gagccccaca 180
gttcagaaca ggaaggaatc atgtcagagc cgatcagcct tcccttctcg agctattagt 240
cacatgagac aaccttgtgg aagttgaatt cagcgactgc caggtaggaa ggacagtgac 300
ctgtgcggca gcatgcagcg ttgagagttc aaatcctagc taacctctcc taatctactg 360
taggaacaag gagcccagga ctgtttgttc tccacacacc tcagccgctc atcttactgt 420
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<210> 560  
 <211> 522  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI012802

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 tccctgcgga tggccctcat ggtggtcaca gggctcgtct ctccagcgtg ctgctgcacg 240  
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<210> 561  
 <211> 615  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI013011

<400> 561  
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 attaaaaatta aaagtaaacc aaagcctaag gcctgggaga aaacctggct acaatctagt 180  
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 cacatgctgc cggctttcaa agctacatca tctggtcagg ctgtcagagg gacagcgctc 420  
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<210> 562  
 <211> 602  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI013044

<400> 562  
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 ggctctctgcc cataggcctc acacaccact tgctctctgcc tcgggacaga ggaggggaat 180  
 gtgcatgcac aggagcagg accaggatac acgattcgtt cttgggagtc atgtgatgtc 240  
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 taccacaccg gtagatatga aaacatagat gtgcacacat aacaaaacaa caacaaaagc 360  
 catcaagtcc actctgtgcc gcacatatgc tcttgggtgt gtgggcatgc aatggagccc 420  
 gatcaacctg ccagtggcta ctcctgagag aaaactgact ctccttcccc tcagaagcta 480

tagctagcta atgagccatt ttcaataatt tggtatctgt tggcacctcg gccaccaggg 540  
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tc 602

<210> 563  
<211> 476  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI013387

<400> 563  
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gtgtgtgtga aatccacgta aggagcacgt ggacaagctg acatggaaat ccatcatgcg 180  
tgctcaggtg tccactggct gccatcagac actcatacac taagagctac ccttgactga 240  
ctgcccactg gcaccattcc caagacccaa gttcatgtgg ggtatatggt caagtgtac 300  
ggttccttct gaacacgaga agagaggggtg ctcaacaggg tcttctttcc ccgctgattc 360  
cgccaagccc gttcccttgg ctgtgggtttc gctggatagt aggtagggac agtgggaatc 420  
tcgttcatcc attcatgcgc gtcactaatt agatgacgag gcatttgcct cgtgcc 476

<210> 564  
<211> 498  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI013657

<400> 564  
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agacagaagt aatgtgaaca taccttattg ctgcattgtg acttggtgac aagattctga 120  
gcctggctga ccatattggag caaacgggaa attctatagg ccaggacagt ttctagagca 180  
caacaaaagt tgcagaaaat atggagaatt gcacatgggt cagtggcggt acagaatcat 240  
taaaatttca ccacatgaat gggaaccagt aatggccaca aagaagcaga actgagtttg 300  
caaagctgag ccatatgggt cagtgcgctc actgcaggag acagacgagg aaggacggaa 360  
ggacggagca cctcgtcagg tgtcaggact caaagtgcct tatgcaaaga aggctacacc 420  
caaaccttag ggagagtcag accaaagcat ctgatgttgt atttaatgat aagatagtag 480  
taagtcataa atataaaa 498

<210> 565  
<211> 510  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI013667

<220>  
<221> unsure  
<222> (1)..(510)  
<223> n = a or c or g or t

<400> 565  
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agttctattc attaaataac aatccaagga catccaacac tagtagcaat ccctaaacca 120  
gaagacggaa cggaaatcct gaggtgcctg ttaccttcca attttcgaat ctgaagaaaa 180

agcacatgga cctcccagtt taactcctgc ggattactac ggtcctgaag aggggcgggg 240  
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 ccagcagcag caagaaaagc cagtctaggg ttccttgctt ttcacaactc tctccaggac 360  
 gcaaaactct tcagagaagg ggggtgggaat caaggaaatg cagcataaac atcacagaga 420  
 aggaagtgag gttgagaaag agttcagact taactgtacg gactgctgac anacgaagtt 480  
 cacttcatga aacaacacaa caccctcgtg 510

<210> 566

<211> 407

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI013690

<400> 566

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 aaaagttggt tggaaaaatc caggtgtaat tgctttgtat gctgtgatgg gtaggaaaaa 180  
 tgaagtgaag tgtgaaggcc cctcaaacc tccatcttgc ctcaaactat gtcctggaag 240  
 cctggggcgg aaaaaacgcc actttcattc ctgcttcttg gggttattta ctgccacgta 300  
 gtgatagagg accacaagca agaaaagcga cagcccaac atggtggcga aaatggcgaa 360  
 ctgcacgtcc gtgatcatcc tgactagctc caccgactc cgaccct 407

<210> 567

<211> 428

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI013745

<400> 567

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 gatcccatga tagatgattt taagccatca tgtggttgct gggatttgaa ctccaggacct 120  
 ctggaagagc agtcagtgtt tttaaccact gagccatctc tccagccttc aatagtattt 180  
 taagctcaag atattaatgg tccagtatat gacagagaaa catgggaaca gattttaaag 240  
 tggggataag aattacgcat ttattgttac tgagaggctc catagtcttt ggacagaatc 300  
 accatcaagc aaaagcttat ctagtaaagt tttaggtggc cagtaacttc atcaattagt 360  
 tctactggtc ctggcccaat tcccaggaca gttcgagagc ctgggttcaat ctgagtacgt 420  
 ccggcatc 428

<210> 568

<211> 584

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI013778

<220>

<221> unsure

<222> (1) .. (584)

<223> n = a or c or g or t

<400> 568

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cagaaacaaa ctagctatta agtggagaag tgagtgtaac atccagtcca ctgtgggtctt 180  
aaccatagtt ctgctcttcc taatgaggca ggtatgaacc ctttttcctc cctccaccac 240  
actcacgagg caattgagtc tctcattgtg acagtacatg gagaagctga cttcaggatg 300  
gtttgtttgt ttttttccat ctctttcctt cgggtggaatc gggccagcct ctttttgaag 360  
gagaatatta tttcttttacg gaatttggcg ccgaggtaga gggaccactg aagagagatt 420  
taagacagat aagactggca aaagcacaga ttgcttgcca caggaggacc tcctaagcct 480  
taggatccga ggttacctt ctctagagac cggatagaaa tgcttgagga caggtaaggc 540  
tctctcccan aagagaggtc acaggcctca tgatttgcac agg 584

<210> 569

<211> 487

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI013832

<400> 569

cctatgctgg ggtttactct ccccaagcca tttccacac tctagaagca cagagcttcc 60  
acaaataagt tttttttttt aaaagccatc tctgtataga aatcagactc tgccccaaca 120  
ttatcatagt ctagactatt tacaaacctt cacattttta ttacacctgt tctgtatttc 180  
cccttccttc ctatccttac caaggagctc tggtagcttt ccttaacaga ccctgaagga 240  
gtaagatgct gtagaagggg tgatgggctc ctcatagcta ctggcaccag cccagttgt 300  
tgtgtcttgc cactgggtgg tggaccgcct ctccccacc actggagatt tgtaggactg 360  
gtgcataggc aaggagagcg acagaatgcg gtgggtgggt ggggcaagac cccacagcta 420  
caggcgtctg tatcatgtaa ccgctcgact tgaggggtgac tggctgaaat caagagagat 480  
cagtcca 487

<210> 570

<211> 568

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI013861

<220>

<221> unsure

<222> (1) .. (568)

<223> n = a or c or g or t

<400> 570

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agtcaaaaac atgtagtaaa aggatataca ggaagcaaaa atacagaagc aagccgggctg 180  
agtgaggaag ctgtaacagg agggtagact aagatactgt aacaatcgag acaggaagac 240  
aagtatagca agctgtctta cctatcaacc cctgcacagt aagtcagtaa cccagaatga 300  
aggaataata gcacgtgggt aacaggacaa atttccctct aatttgtctt tgtaactgat 360  
ttctttcctt ttttaccatg gggtccatct gggttaacaaa acatttgggt ttatttghta 420  
agcagagtaa ataaaatatc ctgatcagag tgctcaattt tgtttaaggt gctcaagggt 480  
canacttaaa aagggtcaact gggctagtca gtgggaacca ttgggtgtgt ttgctaaaca 540  
gatgaaagca gcagcattta aaatggat 568

<210> 571

<211> 492

<212> DNA

<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI013875

<400> 571  
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ggtgggtata cctgggtatgt ggatgagatg ctctgtggga ggctcgcagg ggattcgagg 120  
gtggcctttta taaaatgggt ttattttcta gctgtattta aaggggtgtt taacattacc 180  
tacttcatta aaaaacaaaa acgccccctca ggaaatttag atacaattgc gctagtcattg 240  
gttggcatct atgagagaga gcaactgcat tctgaatgag taaaacggac gtgtgcattg 300  
taatttactt ttcctatgtc cccttcgaga ggggcaaagt aaaacaaaga aagcagtgc 360  
gttggctgag gagactgagc ttgcaaagca ataggctctt ctgtccaggc agctcctacc 420  
ccttcagttc cattccattt tcccttggga ctaaaagctc tgctctgtct catttaaagt 480  
cttgtcttcc gg 492

<210> 572  
<211> 480  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI013876

<400> 572  
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tatattatat ttgcccacca atagattctc agcaagtctg gctgaaatga tgccatcatg 120  
ataaatatta acaaaattag tgagttttca caggttttaa atatttcctt tgaaaaataa 180  
taagttcaac ataatacatg taattttag ctcacacaat ttaaaaagga gagggagata 240  
cctttcttag aacagtttcc agcccccaa tgtgctaagt tgctggctga gttgcagcac 300  
ttggtcaaca ctggaaagaa gtatttatgc ctctctggga aggtaccaa cactgaagaa 360  
aagagagaag agaccccaa cagtccagga gcattcctcc ggcgtgcaag gtcagcagga 420  
aagggtctc catgctgctg ctgacactca tgatgagtcc tggaagcact cagttacaga 480

<210> 573  
<211> 694  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI013911

<400> 573  
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ttgttcatag gtacattcag aaatcacttt ctggccatga gaaaacatca ttacaaaatt 120  
tttaatgtcc caaaatacac attaatttaa aaaacttgat ttatcctggc cacttttttc 180  
tcttgccag caacaataat cctgagtgc tcaacaaaaa ttctgataaa aggaaaaata 240  
ttgggaccgt taacaaatgt cttaaaattt gtctttaaaa gggggaaaag tgtttaaaga 300  
acacatggag ctttcttaaa gttctttaac aaactacctt gggagctcaa ttcaaaaata 360  
gaacttgatg tactaaaaca gacgtttcag cgcagctcca aaaatcttta taaatacagc 420  
aatttgcaag gacgatcctg gatcagaagt gttattcctt gtgtatattg tgtgcatgcc 480  
ccatctcagt tgtcataatt gtctctgtaa tttcctcctg agtagcggtc atagccacc 540  
tggtctctgc cactgtagtc tctagaccgc ccatacccat atccatagcc tccaggctcg 600  
ctgtcgtatc ttccacttcc atatccctgg tctccaccac ctctagagta gctgcgacca 660  
cgcccatggg ccccaaaagc accccctctg ggtt 694

<210> 574  
<211> 685  
<212> DNA



<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI013918

<400> 574

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tatttgccct aaaggaagtg aggggcagag tgaagaacct aagtgcagct ggggtgggcct 120
ttccttaggc taaggcatgc tcctcccatc atccagactt gtgagcccct gctgcccagag 180
cccccaattc ctgcagcagg aagccccagt ggtctggctc tggcactggg agtagaaggc 240
acctgtaggg ctggctgggc aagtgaggac aggtgacctt taacacaaaa tactactctg 300
gtatggggag caggacatgt agctgaagca gctgtcgagg ccctgcacct ctatggcaca 360
cgtggatggt ggatggccac ttctccggga gcgaggaagc ctagatccca acaatactaa 420
aacttgtttt tggtaaaaaa taaatgcaaa gaaggtagat gagggccacc atgaaagcac 480
ccatgttgcc aatgaggctg aagaggcagc tctctggggg gtatgtgcca cacttgctga 540
tgagaggaac atcatccagg gtgcagcagg tcttagggcc cccttggttca gcagggtcag 600
gagagcagga atcattgtag gaccagttct ccaactggga cacgtggcgg ttcatcacag 660
ccatggcata cacagtccat atgcc 685
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<210> 575

<211> 400

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI013924

<400> 575

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aaagtgatta aaaaaagaaa aggggtcaaag cccagatgt cagcgagcaa ggtgggtggct 180
caggaaaaac gggctcttca gtcctcccag gaagtagcct aaaagctgcc actgtccctc 240
agacacaagc tcgagcaacc caaccaatcc tccctgggca aaaggccct gtactggccc 300
ttgtgttttc taacccttcc aaactcggaa actccaattc tgtgtcaagc cttccctgta 360
ccctcaaagg gaagctgaaa gggccctgga ggaggacaag 400
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<210> 576

<211> 126

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI028938

<400> 576

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aaagggtcag tccattatca cagcaggag caccgggca ggcaaaccct ggggttgacc 120
tttaaa 126
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<210> 577

<211> 445

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI028973

<400> 577

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gccgaagcct ttggacttcc cactgcagtc tctcatcacc ttgacactta aggtcttacc 120
aaactggctg aatagctccc tcagattctc atcatccacc tcttctccaa agtttttgat 180
ataaacattg gtgaattcct tggccttggc tccaagctcg gcttcccgtc ctttgcgaga 240
cttgaatctg cccacgaaca ctttgcggtc attgaggagc atgccattca tcttctcgat 300
ggccttggtg gcagcctctt ggggtctcgaa gtggacaaaag gcataaccct tagagccgtt 360
ctcatcacag accaccttac aggacaggat gtttccgaag gcagagaaaag tgtcatacag 420
tgccttggtg tctatagact tgtcc 445

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<210> 578  
 <211> 300  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AI029026

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<400> 578
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gcgctcagac cttaagggcc cctctgaact cgctaacgca tttcaaattg gcaacactag 180
ccggtatcaa agccggaggg ggtggcctgg atccagaact gctgtgagcc agcatccag 240
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<210> 579  
 <211> 380  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AI029212

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<400> 579
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aaagggtgat ggaatccttt agcagtagag ctgggggaaa ggccttttagg ttattggaac 180
atgcccttga gggattgtag cacttgggtc caagcgtctt ttctttcttc ctgcctcaca 240
gtgtaagcag tttgttctgc catgtgtgcc ctgccactgc catttggcac tgttgccaga 300
gacccaaagc aatatgactt cctgatcttg ggtggggaca tccagaactg tcagccagat 360
agattccttt tctctttgta 380

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<210> 580  
 <211> 549  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AI029291

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<400> 580
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taaagcatat ttttaaaaaa cagaaccaa ataattgtaca tttttatctc taaacattgt 180
gtcattaaag tccatatact gtcttttgta taaatcaatg tgatgttaca ataataata 240
tgatctgatt cttatcttaa aggtgctga ccatgtatga tatccaagat agactcaatg 300
cctttaatgc cagactcaga aactgttatg accctagaga acgagggag gctgtatgca 360
caggtgggag tctgatggct tagctatttg cagcatcggc ttggcgaggc catccgtcct 420

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cctccactcc agagtcataag tcctcttccg aggactcttt cgatggagcc cgaatgtatc 480  
ctggttcctt tttgccttct actacttctt tgtcaacctc cacacataca atgtcagaat 540  
taggaactt 549

<210> 581

<211> 482

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI029450

<400> 581

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agtattttcc actgttaatt tgggcataag aatagctgtt tattttgtga cttttttaga 120  
agtttttaaaa aatgaaaaaag aaaaactgta tctgagatct tagtatcatt ggtttttaaaa 180  
aaaggacggg agaggcttct gtttcatcca tcagtaactc cgaccaaaca aggtgtagaa 240  
cttggcagga ttcttgccac agacacacat ggctcctggc tgcagctcac acagagggtt 300  
gaaaggaatg caaaggcttt tggctcccat ggatggagca ccagggtcca catcctgatc 360  
cctggccgtt gtcgttttga tccagtcttc acagtcaatt tccccacaga atggaatctg 420  
tgcaaccttc ccagaatcta gcaccttctg aaagtcttcc agtgtatccg atacaacctat 480  
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<210> 582

<211> 240

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI029709

<400> 582

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ttagccatca gacatatgaa agacagtatt agccttggac atttcttggc acttggttca 180  
gagtgggtggc ctggaccaac acctctaagt tcacatgccca agggccagca atctgtccaa 240

<210> 583

<211> 515

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI029827

<400> 583

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gttgggtgaa aaaacagaag agggctacac agtcacctaa gacagtcaca gaaagatggg 180  
cttcaggagg ctgccctgcc cctaccctgt agcagcagag ggagtgggac agtgggctcg 240  
cccagatggg aagccatgtg cttggactgg ctggacctgg cttacagctt gggttcttgg 300  
gatacttgct atccactacc tctccctgaa tctcattac tctggatctt ccagacttgg 360  
aacagttaag actgggataa aggtaccgga ctggtgtttt atttgaaagg gaaaaataag 420  
ggtcagtgtg tgcattgccc atcccatgag gaagggcaga accatgcca gaacatctc 480  
aaggaatgga gatccctgag cctgggggta cactg 515

<210> 584

<211> 323  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI029829

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 ttatgccaat tttctttgca attgccaaag agtacaataa gtgaactcct taaatgatat 180  
 acttctgtac ataaaaatc catgtattaa tacaagtgtg tggagcagag tttaaaggta 240  
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 actgtgcttg gaagtgggtc cgg 323

<210> 585  
 <211> 485  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI029847

<400> 585  
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 tggtcagagg taaggagat cggttggtg ttggagatgt gcaagtccac ggttttcagt 180  
 gatgaggctc ccccttcccg ggccatctct aacagctcct taagacatgt aggaacaacc 240  
 ttgacctatc caagcctatt gaccacggc tggctcctggg gccacgattc cccacacag 300  
 aaccacagag tgtatcgttg ggaatgtctg ctctcttcca tgaaggcaat gagatctggg 360  
 aaccacagag tcaggtcagt aaagaaaggg tcacagttac agcagccggt tcctggactt 420  
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 accat 485

<210> 586  
 <211> 319  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI029917

<220>  
 <221> unsure  
 <222> (1)..(319)  
 <223> n = a or c or g or t

<400> 586  
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 agaacagcca gagcaggtga gtcgaggtgt tctgggtgac ttggggctca aggtatcaag 180  
 gtaactatgg caggtcggga cagcaagaaa gaggtccag gagaatgaga tgatgttccg 240  
 gtgttcaggc aagcangggg tcacagcaca ctgggattcc ggaagttgtg tcncgcgaag 300  
 cgctcgtgc cgaattctt 319

<210> 587  
 <211> 537  
 <212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI029969

<400> 587

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aaacagtttc atgcttataa aagtcaccga aggtcaagtt gtggcaagag cacgtacaat 180
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gacacgaaaa gaacaacgaa tacacatttc tgtattttga aggcaattca caatcatttc 300
caggaattct gtgagaattt aaggccattt gttctaaaga aatgtagaca tgacttcaca 360
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cagatcaggg cggaggggtg ggctatttca cacacaggca ggtcgggcca caggggtgag 480
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<210> 588

<211> 147

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI029996

<400> 588

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cattaatgga ggaaagttcc cacatttaac acaacccaaa acggctgggt caagagccct 120
cttcaggtga gctgggtagc atgccct 147
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<210> 589

<211> 394

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI030024

<220>

<221> unsure

<222> (1) .. (394)

<223> n = a or c or g or t

<400> 589

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acttttgtac atccttaaaa agggggatat atttccttgg aaattcagca atttgttcag 180
ggcatggata gcagggggtt gccaggtagc tctacactaa gcatccgaat ggccccaggt 240
tgccctccagg gttctgcagt tactgaaagg catgaggatc cacgtaaaaag gcanagagca 300
actgggtaaa ctgctgcaca aaagacttct aactgtattt tatcggtttg cagactggga 360
ttattatttt agttcatcct tcttatgaag agcc 394
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<210> 590

<211> 503

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI030069

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 tattcagctt cagtcctgct cgcagaaggc gggcttttctt tctggttggt tgtccatggc 180  
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 cgacttagga ctccaagcag cgtagcgttc tgatgacccg agaatgctga ggtcgggtga 360  
 gatcactgaa gggaggatac ctgacctcga cccgtgaaga gtacagtccg tgcttacgcg 420  
 ttggcgccgg gacctttctg ctgccccaga cggccccgga cgccgcggcg gagttcctcg 480  
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<210> 591  
 <211> 192  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI030170

<400> 591  
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 gcaaaaggac cttgcccaga actcttcate ccccagaaca gcaacttttc tccactcgcc 180  
 ccaaggcccc ct 192

<210> 592  
 <211> 399  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI030242

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 caggccttgg ctttgaacgt acccgttccc ccacatgctg gccccttccc ctggtccctt 180  
 cctccctaaa cgctcgtgcc tgacctgccc acaggcagct actgccctcc agcagagtac 240  
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 ggagcaagga ccctcagaaa gatttccttg gggcacgtcc tgagtggggc gtggggcaat 360  
 aatgcttctt cagtctcccc ctttcttctt ctctcaaga 399

<210> 593  
 <211> 372  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI030259

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 gggagggtag aatatgttct ttaggtacag catctctcac tgaggagtcc agaggctccg 180  
 cacctaccac caggaagctg tgcataccca cagcccagac cccctggtta tcacagcggt 240  
 aactatcccc aacgtgagct gccgccgaag gctctacaca agcgagttgc aaagcctcac 300  
 ggaaaatccg aggatccggc ttaggacagc ccacagcctc agaagtcaaa acaaaatcaa 360

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aatgtttctct ca

372

<210> 594

<211> 562

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI030271

<400> 594

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ggacatgtct atataaaagg tatttctaga aaaaaaaaaa acccacaata aaatcaaattg 180
agccaaacaa aacataagaa gcctttggta cctttcaata acaaaagaga aacatattta 240
gatgattaaa ttcacacaat atgaaaatga aatattgggt taacttcata aagcagaaaa 300
ggagagccta aagaatatta gcatccaagg gcaaaacttc ctttttctcc tctttgattt 360
taataaacc ccagaatttg gcaaagaatt tcttgaactt aaattgtctt ctggtctgca 420
gatacctagc agtatggcgt ttcccactca cctgatgttc aaatggcact gtctggtcat 480
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<210> 595

<211> 394

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI030449

<400> 595

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tgaaattaaa gttcaacatg gtaaagacaa ggaaggcgct ctaccctctt gacctccaga 180
gactccacag agatagcaac agtaaaggca gcagagactg cctgggtcag actgtaagca 240
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<210> 596

<211> 447

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI030668

<400> 596

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caggaaagca gaaggtaggc cctaccacaa agaaaagatg tcattaatgg aggttaactt 180
tcaacgtaca ttaaatacta tcaattaacg tctgaagaga acctagggtt tgttcacctt 240
gctataagca tgagttgact tttgttatgt cattgaaaac ataaaaatgc cttaaaaaatc 300
tcagctatta agtatgatct tactggaaat tcttaaccac aattttcctt cctggaatga 360
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aacctgttct accagtgaa acagctt                                     447
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<210> 597

<211> 398  
 <212> DNA  
 <213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI030835

<400> 597

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ttaaaagagaa gttataagtt catgggtactt tccaaggatc tggcggttaac atggggtcac 180
acggaagtcc tctggtagca cctgatgtgt tcaactgttct ttctcggtgc ctggtggttc 240
tgttgactgc tgctctgtga cctttaattc atgatgcttt gtccattgca tgataccaat 300
catcaccttt gtctcattct cttgtgtggg gaagaaccaa acttgttctg gtgaccagac 360
atctgagcta gttgttcttc aactgccatc agtttgat 398
  
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<210> 598

<211> 451

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI030932

<400> 598

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gtgacaagag cagggttact gagttgtgag ctgagactgc tggaccttca ggctggcctt 180
gtccacctcg gtagactgag gataaaaggg acctaccagc cagttgagag gcgtgttgtt 240
aacaaggtaa tccataactt catctaagga ctcccttcat ttctgcagct gcccttgct 300
agaagtgagg acgccatcag acacttcctt gaaggaggta acattgcgga acgcccagta 360
gatgtcacct gccatcacc ccaagtgtt ggctgtgtct tgaatgttct gtggtaaccc 420
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<210> 599

<211> 191

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI043654

<400> 599

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cccttatcac catcacaacg aattcttcca agttaagtgc gttgctcact atctgacgtc 180
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<210> 600

<211> 410

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI043655

<400> 600

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cctcactgct gttggactcg gatgtggacg cccagcggca gtgagccac acatccttca 360  
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<210> 601

<211> 370

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI043724

<400> 601

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cacaggacag gcctgagatc agttcattca aataatcttt gtacgcagag catcccagag 180  
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<210> 602

<211> 188

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI043728

<400> 602

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<210> 603

<211> 485

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI043752

<400> 603

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ccaaaaacca aaaaagccca aaccagtaac agtaacaaga acctctgcaa aatttaaaca 180  
accgttactc atctcacata aggatacaaa cccttccttc atagcttaga aagtacctcg 240  
catcgtctga gacagacatc cagtccaaat tagtaaaatg cattttaaag cattacaagt 300  
ctaagcatac agaaacagaa accacacccat cggtcagatg aacacaagca cttttggctg 360  
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<210> 604

<211> 346  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI043761

<400> 604  
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aaccttcttc cccttaatat tccaaaacaa atgaagatga acatgaccaa ggtgcagaat 180  
tcagctgggg aattagaaaa tgttaagcag gtagagaggg aaattgtaat accatagcat 240  
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tatcgatcga ttaatcccaa aatgtagcta acatctagct acacac 346

<210> 605  
<211> 498  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI043805

<220>  
<221> unsure  
<222> (1)..(498)  
<223> n = a or c or g or t

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<210> 606  
<211> 323  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI043855

<400> 606  
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ttccttcgtg gatgaagtct gcaagtccca gccctgctgt agagccagcc gctccctgac 240  
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<210> 607  
<211> 487  
<212> DNA

<223> Genbank Accession No. AI043945

<221> unsure

<223> n = a or c or g or t

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ctgggat						487

<211> 487

<213> Rattus norvegicus

<223> Genbank Accession No. AI044101

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atagctggaa	agttgaggca	ccagcctgaa	aagcctaaga	atcttctct	tctcctccct	480
cttcctc						487

<211> 337

<213> Rattus norvegicus

<223> Genbank Accession No. AI044241

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atatggccca	ggccttgca	cagtgaggaa	gtccaacgaa	ggagctccct	gagtactttt	180
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acgttgaggc	tgccgatgag	gtctcgacga	tttgtttat	acacatcatg	ggtgatgcgg	300
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<211> 471

<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AI044247

<220>  
<221> unsure  
<222> (1)..(471)  
<223> n = a or c or g or t

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ggatccagcc ttcaggaagg tcctaccttc caccctattc caggcagctg gtgaggctga 180  
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tgctacttcg gttgctcagc angaagagga tgggtgtctac cacgttctcc acctcagcaa 420  
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<210> 611  
<211> 356  
<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AI044292

<400> 611  
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cccgaacctga attttcacag agcttataaa ggaaaaaacc acaaaccagg gggatcaaga 180  
gggagggagg aggggaattc caaaaccata aactgcccac acaatttagg actttgtgac 240  
attgtgatta ggggtagtga cattttacag ggccattgga ccattgtggc cggaggctat 300  
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<210> 612  
<211> 477  
<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AI044325

<400> 612  
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ccgccacaaa atattttgtc ttttccttat agtttcagaa atcagtacca ttaaagcctt 180  
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tgatattccc tgggagccca aactgggtcg cagcctacgc caaagcctcc agcaagcacg 360  
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aaactgttca tacgtgtcca aaagccaagt ccgtcctgcc gttcagtcac caccacc 477

<210> 613  
<211> 407  
<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI044338

<400> 613

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ataaggtttc tactccacct gataaactgg cttctatccc caccatgggtg ccagttggag 180
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tacgtttcag tttctcaaac cagaggggca cccaaggcac tttccctgtc cccactcatc 360
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<210> 614

<211> 283

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI044345

<400> 614

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<210> 615

<211> 447

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI044404

<400> 615

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gatgccatta aacaccttag ggtttatgaa gacctgtaca acatgggtct ttttcagggt 180
ttcaggttgg tggagatgtc acacatacat acctccctgt actgtaacac agaaatcaat 240
aaatatcaca aaagaaccag ataccattgg acttgagaga cagaactcac tgctaggaaa 300
tgggagaacg ctgtcccacg agagctgaat ttgacttgtc aggagtaaat aggatttcca 360
tagcttgtgg tgaggactaa cgatctaagg aatgtaatac aaatgtatcg gaaagggcag 420
actaaattgt gaaaacaaac agttcag 447

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<210> 616

<211> 446

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI044533

<400> 616

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ccaaaatcaa gaaggggaatg tggattctgc aaagccttcc acagcaaacc tgggccccag 180  
 ggaccctcct ggccttcact gaggaatgaa gataccactt gggagtccta acccgcct 240  
 gcagtaccca ctggaccca agatgtcttc aatccaggac aaagcaccct attttagccc 300  
 taagatccac actaggcctc agggctgagg agaagcttgg ctcatgactg gttggagatg 360  
 tgcttgatg ctgggtgcag gagaaacagc cactctggcc acagccagca cacaggttct 420  
 tgtgtcaggc tttcatcact gccatg 446

<210> 617  
 <211> 387  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI044550

<400> 617  
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 tggggcaagg gaagttgcta tattgaaatc aggggaatggt tctgccagta cgtcagacag 180  
 gtgctgtctg cagagcagat ataagagacc cctcaggtga taatgacagg gtcattctct 240  
 aaggagatag gacaaggctc agaaggggag aagatgcaag aaggacattg tgtcggctga 300  
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 catctagtcc caagagatga cttttat 387

<210> 618  
 <211> 263  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI044621

<400> 618  
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 ccagtcccc aactctctcc tagtaaacgg aaaagagtcg agtaactcgg tgggagcttt 180  
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<210> 619  
 <211> 388  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI044900

<400> 619  
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 accagaaggg tcacataaat gtactgcatg tgagggtggg agggaaaggg acaaggggaa 180  
 ggggttaaga agagaaatct ctggtccact gtgactttct tcagcctgga cagttgctct 240  
 taaaggggta gctttcttcc agtgtactgt actcttcaga gcagcagacg gctgcagggg 300  
 gtgcagccag cagcagacgt atcagaaaga gtaagtccta accccttggt tagaaaaaca 360  
 ggagacagaa gttttaacac ccacctta 388

<210> 620  
 <211> 460

<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI044925

<400> 620  
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ggagtaactc tggctaactc ggagagggaa gacaaagtgt agatctgggt gagatttggt 180  
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cgttgacatt tgccggggagg tacggcgata gctgcttctc agctatcatt tttcccccta 300  
ggcactgctg gctttctttg actattatag ttgccagaaa aatccttgct ttttttactt 360  
tgaaaccagc atttgaatgg caagttggat ataatgggat gagaccaaatt ctttccattc 420  
ctcacggggag taatgataga acacaatttc caatcccaca 460

<210> 621  
<211> 320  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI045116

<400> 621  
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gaaggggttt ttaatgcgta gaaatatcgg ttgggcttag tagcacatac caactctagc 180  
agagtcaggc agatctctgt gagactaatt ccagtctggg ctacacaaaag atgtgtaaga 240  
ctgaaagagc tacatggtga aaacgtctct caaaaacagg agcccaaaaa gataggaaaa 300  
atattcagac cctcgtgccg 320

<210> 622  
<211> 396  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI045195

<400> 622  
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aagagctcat acagcagttc cacctcctcc agggaggtct gcaggactgg attcaatggc 180  
agggacaagg acctctttgg ccgatgggca gctgggaaca gtgcagccct gctccacctg 240  
cacgcagtgg cctgggcgct ggagagcacc agcagaatcg tcagcacctt ccagggcatc 300  
ttccaggagt gagacaaact gaccttctat tctctcagga ccccaggagc cacaggtggg 360  
ccccgtctct tctctgcgag cctcgtgccg aattct 396

<210> 623  
<211> 353  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI045253

<220>

<221> unsure  
 <222> (1)..(353)  
 <223> n = a or c or g or t

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 cagcagataa gagcacttgc tgttcttgca aaagacctaa gttcagctat tggctcctat 180  
 atgggtggctt gcaacttcct gtaattccaa ctccatgtag ttcttactcc tattttctgac 240  
 cattgtggga catcaggtat gcacggggta cacacacata tatgcagaca aaacatttaa 300  
 ataaacatga aatanaataa tctaaaagac cttcagagag gattggcaat gta 353

<210> 624  
 <211> 457  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI045256

<220>  
 <221> unsure  
 <222> (1)..(457)  
 <223> n = a or c or g or t

<400> 624  
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 ctgaacatca tagtaaggct ggggtttcag gaggttgct gtctcggttt acttagatca 180  
 gagtgcagat tgtgcagagc cttcttgctg atacattcat tactgtcgac ttactgtttc 240  
 tatctgaaca agaacagcag cttttctcac cagaagtcac ccacattgct cagcttaaaa 300  
 tgtcaccac ttggaaagggt gagcccatgt cagcatagta ctgctttaa ggagagtcac 360  
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 aatgtcagat atatcatgtt tagacaactt tacatga 457

<210> 625  
 <211> 396  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI045440

<400> 625  
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 ctggatctcc tggaactgga gttgcaaaca tttgggagcg gccatcttag gtgctgggaa 180  
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 cccctcacca atatttttca taactgtaaa agtaaaagaca tttattgtgt aaaacaaaga 300  
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 aggatgtagc tgctatcaca aatgcacctc gtgccg 396

<210> 626  
 <211> 439  
 <212> DNA  
 <213> Rattus norvegicus

<220>



<223> Genbank Accession No. AI045441

<400> 626

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ctgtcctttg cacataaaaa ttttgtttga aactgtgatt ggttgagtac acgagttttc 180
tctaaccagt caccacactc tgaaataacg ctgctaacat tcaactgata aagggaccgt 240
ccccttgggt aaagtgtcaa gcagggttaa atatgtataa tagacaagca ccatgaggaa 300
tctgctcctg ctcgatgggt ctgtgtctca atgtccttgt gtaccctctt tttgtgcaag 360
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ttaaaaaaca ttctcatga 439
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<210> 627

<211> 453

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI045555

<400> 627

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atcatctctt cagttcctct acgtacccaa aagcatcccg gagaagctgg agccgttctg 180
gatggtgagg actgccccag aactgttgtc cacgaacaca gagacatact gtccagactg 240
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cacagcctcc agggacgtat gacgggtgaca caaggactca atacagatga ggacacggac 360
cgtgtcccgg gtacgtaacc ggcctctgcc ctgcagttca ctgtgggtcca cgtgcaggct 420
ggcagaaaaac tggaagatgg cagagactgg cgc 453
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<210> 628

<211> 422

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI045624

<400> 628

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cctaccacgg cggccaccta accatacgcc ttgctttggg tggctgcacc aaccggcctt 180
tttaccgcat tgtggctgct cacaacaagt gtcccaggga tggccgattt gtggagcagt 240
tggtgtccta tgatccacta cctaacagtc atggagaaaa gctagttgct ctcaacctgg 300
accggatccg gcactggatt ggetgtgggg ctcagctctc taagcccatg gagaaacttt 360
taggtctgtc tggctttttc ccgtgcatc cgatgatgat caccaatgct gagagactac 420
ga 422
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<210> 629

<211> 551

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI045802

<400> 629

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0991700-0310  
Total: 0082650

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ggggctcctga tacaccccag taacataact tcctccgaca aagacccact tcagttccta 240
ccttctttaa gctaagggcc aagccttcaa catagatttg gggtagattt aagatccaaa 300
taggaccagc caccacgaag aaggatttta taggagcaat tatatggaga atgttaagag 360
ctaactacac cctttctaca ctagagaggc aggtaatgcc gcagaaaagg gggtaggttg 420
ataaagtccc acgcacaggc agcaagctca gaggattcaa aagcacttta gagggacttg 480
ccctcaaagc ctgctgctcc ctctcatcca gtgtccacac agagctgacc gcatttccgg 540
gtagcctggc t                                     551
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<210> 630

<211> 387

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI045881

<400> 630

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tgtaaaggca gcatttttaa tacctttatc ccatacctgaa aagtaatctg tcacacctag 180
gctgggcact gaattttaaac ttccccacat tgctaggcta tggctggaga aactgaggg 240
gtccagttaa cctgaagggtg gttggaaagg accgtatcac agcccctgca acaaaaatgt 300
gtaaaaaacc ctgttggtgc caatccactg gctccctaga tttaaaatat cctgatattg 360
caccaaaaag ggtaactaaa aactgtc                                     378
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<210> 631

<211> 378

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI045972

<400> 631

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tttatgttgc cggagtcttc cttggaagtg ggaggagctg gtgattgaga tacactagtt 180
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agggttgggg atacaacccc agcaggtctg caaacacatg ggcagagacc tctgccccaa 300
gccacaaga acacggacgc tgatggggcc aatggtggta gctcctggag agtgaaaggg 360
acgctgagat gttacatt                                     378
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<210> 632

<211> 319

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI058319

<220>

<221> unsure

<222> (1)..(319)

<223> n = a or c or g or t

<400> 632



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tgtggctcgt ccttcacctt ggctttgtct ccttttagcat ccccttcagc atttcttttg 360
ggcatggcgg cggcagggga cgtcggcgt gagcacgggt ttacagcggc gcacggggtt 420
ggtccgtccg ggggtcgtcc tcgtgcttc ttctctgtgc cgaattc 467

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<210> 636
<211> 496
<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. AI058436

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<400> 636
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gtccttaaat aaagtgttca cagagtaaaa atcagaacta ccagtccttc cctccaacac 180
aacagagcac aggcacagaa ccgatagtcg atgagcccaa ggagtaagga ggaggtgga 240
gaggacagca gaggctccca ggctgccgcg tccagaggga gagccctctt tggaatgggc 300
tgaggaaagc cggccagccc cctacacacc tcataccac tgctaaggct aaaagaaaag 360
gacaaaactc agtctcgggt ccaagggctc agaacagtc aggtgggcag ggtccggttg 420
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tggagagtgc ctctc 496

```

```

<210> 637
<211> 490
<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. AI058581

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<220>
<221> unsure
<222> (1)..(490)
<223> n = a or c or g or t

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cggccgccgg acacagccgg ctgcagtgtg gaccatggac tggagctatt gaagacccaa 60
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acacttgagc tgtttcccaa aactaagtgc tgcaggagag cagaagcagc tacctagcct 180
gccagagaca tgctgtttct aggctanggt gactgctgac acaaggaagc aaaaaaaatt 240
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ccctgggaca tgctggagat gtactgttgg tacgtagaca tgacagaaca tgatgaatgt 360
tctcagaatg gaagaacatg gcaaagaaaa gttggagggt tgaaaagaag gaaagactta 420
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tgaatgttaa 490

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<210> 638
<211> 376
<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. AI058603

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<400> 638

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 gagcatcgag acatggacgg tgaagaatag gatcatgggt attcgtttagc tttcttcttt 180  
 ctctgttgac aaggcagctc cagttacatg ttattagggg gcctgacttt gtagcagaat 240  
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<210> 639  
 <211> 346  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI058746

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 gtgaccgaaa attaatgttag gggagatgaa aacttcctgg gaagagaaga ggaagggtaa 180  
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 caacatgggtg acagaagttt aaaatcttta agccacgact ttgaaggact agtgcagcag 300  
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<210> 640  
 <211> 371  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI058956

<400> 640  
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 taaaacataa cagtcccatc tcctttcctt aaggcagaaa tgcccagacc ccatgccaac 180  
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 acccagagaa ggggttagaga cagacagctg tagagagagg ggcaagtcaa gctggggggc 300  
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<210> 641  
 <211> 324  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI059270

<400> 641  
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 ttggaagggc taagttagt cctaagcggg tatcaaataat gaatctgcca tccactgcag 180  
 cacgctggat gctaacacgc tgaatacagt taacatttaa acagacttac ttcttcctgt 240  
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<210> 642

<211> 243  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI059386

<220>  
 <221> unsure  
 <222> (1)..(243)  
 <223> n = a or c or g or t

<400> 642  
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 gggatagaat ctgaggcctc agacatgaca ggcagggtcct ccactactaa actatgcccc 180  
 agaccggagg ggttctangc aagtgtcttc ctattgaaac atggccacag ctctcagtg 240  
 gta 243

<210> 643  
 <211> 405  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI059389

<400> 643  
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 aaagcagaat ttttaaaaaat gtaccagtg ttgatttcac ccatctaaaa ttgttgtaga 180  
 attcagaggg ccaagctgaa aacgtacata gaaaaataaa ggtatagaaa ataatttcag 240  
 attgttttgt tggagacgtt ggtggcactg ctgagggtct tggctgcggc tctcactcat 300  
 ggtggtacac cgcggtgtgg cctgctggct tctgcttggc ctctaaaaca gctggatcat 360  
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<210> 644  
 <211> 493  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI059444

<400> 644  
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 agaggttttg ttttggcagt gctggggata caaccaggc ttttttattt ggtaaaaaaa 300  
 aaccctaaaa actatcacta caaaaacaaa acaaaaacaaa aacaaaacaa aaaaacccta 360  
 atatatataa agctacttct ttctgtgaaa gagaaaattt gaaattaaat ttgttgtcac 420  
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<210> 645  
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 <212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI059543

<400> 645

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cccaaaggct gacgctgata ctctatggct atgtggaagc cacgcaggtg gtgacatggt 180
caatgctcca actaggagcc catacagcag aatcagcatc cagggcaggc ttatagggac 240
tggcgctgtt ggaggacgcc tctgtagacg ctccaatgca ctcccatgca ttggggcca 299
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<210> 646

<211> 374

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI059604

<400> 646

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ttacttaga aaagagttaa cagtaaactc agtctaaaca agaacctact atcagttata 180
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gggagagcca gcgatgactc agcacctcca tgattaagga agcctggagc acagacgccc 300
tgatggggag gaggggtgga ctccagtctg cagctcctcc acatgggctg cagggcctat 360
tgccggatgc tttc 374
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<210> 647

<211> 250

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI060071

<400> 647

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<210> 648

<211> 390

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI069920

<400> 648

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ttacagtctg agcccaggca gcaggggcag actgggcctg gaatgggctt atagaacctc 180
aaagaccacc cacagggtcg cacatcctcc cagaggccat gcctcccaat ccttctaadc 240
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<210> 652  
 <211> 408  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI070319

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 gtagtgccgg tgggtgggtg taaggctcca tctggacctc catctccacc tcctccaatc 300  
 cactttcatt ggccttctag aactgagatg tacaccgctc ggctccaaaa aggggtctctc 360  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI070350

<220>  
 <221> unsure  
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 <223> n = a or c or g or t

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 gatacagtag caatgccccg ttccagggcc cgggtgtcat gcaaaataat aggaaggcgc 180  
 acttgcccg gtagtagaaa gggaaccaga acaggagtag atcgctgaag aactcgacta 240  
 gaccgaacag ggcgtacacc acccagtagg ttagccacac agtgctgctt tccttggttg 300  
 ggctctcgat agctttgact gaagcatatg cgggggtatac aaatccgatg acattgcaaa 360  
 gtagagacgc ccgtagccg aacagaagat acaggcctag aagggtgagg gctcncgcgg 420  
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<210> 654  
 <211> 332  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI070421

<400> 654  
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 cagaagttgg tctatcgggg ttctttctca acagacatga tttctagaaa cacagcagcc 180  
 atcttgtgac tacgaagcaa ggagcaatga gattactgag aggaggcccc gccctcactg 240  
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<210> 655

<211> 554  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI070511

<220>  
 <221> unsure  
 <222> (1)..(554)  
 <223> n = a or c or g or t

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 accttcctga gctccgcctc tgtctgttgt aacttcactt cgtcggcctc ctggacctca 180  
 aggggcacct ttgctgagta gccagaggca gcacggcgct cctgcagccg ctgagcctgt 240  
 cgctgtgcct cactccgctt ggctgcagc ttgccagct cccgggctgg gtccacgagc 300  
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 ggtgcaggag caccagggc caagacggcc accacaccg cactggccag agtctgcacg 420  
 tagggcgaca ctgccgaggc caaggcaccg gtagcctcat cagctacttc caagaaacag 480  
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<210> 656  
 <211> 286  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI070611

<400> 656  
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 gacaatatca tgctgttcat tgataacaata cagccctgtc ctgggtatac aagtctgtga 180  
 catcattcac tacatgaatt tacttcatga gacggcatag cagaataaga ctaactaaag 240  
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<210> 657  
 <211> 428  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI070879

<400> 657  
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 tatacaaagt tcaaaaacta gtccacaggc actcgcccaa tctacagggt gccgttttaa 180  
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 gagggcaacag tacacttttc acaaggaact aaccttaag gaaaatgtta ataagtggga 360  
 ctaccttaag aattaaggta aggacgggtg tatgggagga gttagagggt ggaaagggag 420  
 aagggatg 428

<210> 658

<211> 381  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI070895

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 aattcgtatt ccagatgtgg gcacagggtg gcttcatccc agtttccagc agtatctgct 180  
 gtggctatgc cctctgcttt ccagaagcc ccaggaagga gccttattgc ttctggagag 240  
 atcagagcac acggtgtcca gatccctaca gcctggagga aggggggtcac aggtcaattc 300  
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 agctctaact cagtcgtccc t 381

<210> 659  
 <211> 384  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI070903

<400> 659  
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 ttaagaggtt gaagcgagtt ccactctaaa cacctctgga agagacactg cgaggggtcag 300  
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<210> 660  
 <211> 509  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI071162

<220>  
 <221> unsure  
 <222> (1)..(509)  
 <223> n = a or c or g or t

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 cacgtccata tagctaagtc actcaaggct cacactaata caggagatga tccaagtcaa 180  
 gctgcattag tgggtctttc ctggtataga cttactatg atttctgata gcagctcctt 240  
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 caaactaagt agttgagttt acagaaattc tgagaaaaca actgagataa aataactaagg 360  
 ttaataatta tcacatatac aaaactctct tatattcatg attcttatac taatatactc 420  
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<210> 661

<211> 504  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI071166

<400> 661  
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 aatgcataat aaagactgtg cttctaagcc tttccagtct gggtaagggtg aggggacgcg 180  
 ctgtgtgttt gtggtgacta gtcagccctg tttaccttcc aggatttggc acatttttctg 240  
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 gggacccatt cagggggggcc ctgaaaagcc agcgaggctt cgctcagtgc tgacaggact 360  
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<210> 662  
 <211> 472  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI071177

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 aggaactgaa agtaccacgc acaacaatct tatgcacttt gaagcatgtt agagaggacg 180  
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 gctcccacaa agagaaggga acacttagct gctgcccctc tctataggca cgaccgtgca 420  
 gcacttcact gcccgctgaa ctactagcat tagaagtact cctcgtgccg aa 472

<210> 663  
 <211> 519  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI071181

<400> 663  
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 agtctgcgcc gtaatatgga tcctttcggt gaacgctttt gttatcaggc tcaaatcgga 420  
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<210> 664  
 <211> 555  
 <212> DNA





<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI071538

<220>  
<221> unsure  
<222> (1)..(510)  
<223> n = a or c or g or t

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<211> 498  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI071578

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<210> 671  
<211> 330  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI071642

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ttccctacaa tcaatcctca gtctttaacc tcaaccctgt aacgttcaat cataatcccc 240  
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<210> 672

<211> 336  
 <212> DNA  
 <213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI071858

<400> 672

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<210> 673

<211> 334

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI071867

<400> 673

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<210> 674

<211> 271

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI071868

<400> 674

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atagatgggt atctggctag aggttaacaac caaggaaaga gaaaacaaag aaagtcatac 180
aaaggaggca gagatgggat tttgtctgag ctagatgagt ttgggtgcaa tgtgaggagt 240
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<210> 675

<211> 450

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI071965

<400> 675

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09913002310



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acagtgtcct ggtgtttttg taacacacct cttgctatat caatatagct ctgactgtcc 420  
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<210> 676

<211> 384

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI071967

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<210> 677

<211> 335

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI071990

<400> 677

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tgatgaagac ataaaataga aacactcaat ttgctcacac aaatgctcac aggttctgat 300  
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<210> 678

<211> 362

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI072014

<220>

<221> unsure

<222> (1) .. (362)

<223> n = a or c or g or t

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<211> 367

<212> DNA

<213> Rattus norvegicus

<220>

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ccctccatgt ttccaagtgc cagagccctg tctagcacct gtctgctggg acattcggta 240  
gtagcgtcac tcgtcagtgc tcagtgccct gcagcattgg cagagtgaac cccctgggc 300  
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<210> 680

<211> 512

<212> DNA

<213> Rattus norvegicus

<220>

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<400> 680

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gcaaccagtg ctcttaatct tcccagctac cactgccaca gccccggat agattttaga 240  
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<210> 681

<211> 419

<212> DNA

<213> Rattus norvegicus

<220>

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caaggacttt catgtcttct gaagtcaact gaaattcaaa aacctgcata ttctctttta 360  
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<211> 380

<212> DNA  
 <213> Rattus norvegicus  
 <220>  
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 tgccatgtgg aacaaacgcc gtgttgatca gatgggctgc agcgattcac tcttgagcat 300  
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 <212> DNA  
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<220>  
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 <212> DNA  
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<220>  
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 aatcattttc acagatgcca gttgtcacac accagcttca ggctcaccac atacctggga 180  
 agcctttgct tttattctcc ttgccataga gatttgacat gacagtgggc agaaagctgc 240  
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<210> 685  
 <211> 431  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI072384

<220>  
 <221> unsure  
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 ctgatcctac agctgtctat agagccccc a cctgaccctg ctgatatcat ggctgagtct 180  
 tctccccaag caagataggt aaggaattct ggaagttgga ccattcactg aggagcgatc 240  
 tcttcactcc ttccgagctt ctaggctacc cagcaccagt gcagcctggg tcttggtctt 300  
 ctgcagaagg ctggagattc gatggcgtgt cttctcttta aatacatcat ccgtcatgtc 360  
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 tgccacctgc a 431

<210> 686  
 <211> 432  
 <212> DNA  
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<220>  
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 tatataatta acagccaagc gatactaatt ttatatattgc agtgtcttag ttataggtta 180  
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 ggcggaagt gcccctgtg tcaagtctctg tgagtgtctgt tttattccac gctcaacca 360  
 gagtcgtttg agttgggggtg aatcacagag acacacacat caatctcatt tacttcctgt 420  
 gtgtgcgcct tg 432

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 <211> 274  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI072476

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 tagtaacctt attttgttaa tagggaatcc aaggtttgac aaggttaatt cgctgaccaa 180  
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<210> 688  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI072578

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 ggcggcgggtg cactaggcct cgtctggggc tgcagcccg actcaaattg gttccagaaa 240  
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<210> 689

<211> 352

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI072633

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 ccagcctcct agcagcagtc cagtagagca ggggttggag gcacccttgc cctcccaactg 180  
 agaattcctg cagcaatcct tcaatggcaa caactgtccc tgctcaagtc tcccatcttt 240  
 atcctcagct gcctttttccc ttcaaagagc aggatgctcg cagccatggc tgaattcaga 300  
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<210> 690

<211> 333

<212> DNA

<213> Rattus norvegicus

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 catccacgac cttacgggta gttgtcctct ggacagtttg catggagttg ctggagtcca 180  
 gggcgtcgtt gagactgaaa tcgtcccat cctccaacaa gcggcggtag gtggcaatct 240  
 ccgcctcaag cttgaccttg atgttcaaca gggcttcgta ttctgggtc tggcgtctgc 300  
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<211> 359

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI072643

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 gtcaccgtgg aggcttattt aaaactggaa aaagaggtcc tttgtgacat cctgctgcca 240  
 ttcaagatgt cttcttgaat aagccctaaa gtcactcact ttctctgtgt gttccctggt 300  
 ccactctcac tcactacagt ctagtcttta catggcaggt agcaagaata accttaaat 359

<210> 692

<211> 434

<212> DNA

<213> Rattus norvegicus

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acaatgacag tgtacatggc tagggtaagt agcgtcacca aagattagtt ctctcgctta 180  
cactaagtag gcacgcacat cccaccccag caccgacttc acagtcagct gtaaagagtg 240  
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aaaggaaaga gaatttggct gaaaagtatc cttttcttta gttaaatacga aacaagtctc 360  
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tccacgccac tgtg 434

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<211> 499  
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<213> *Rattus norvegicus*

<220>  
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taattctata gtagagaagt acaaagtctg cacaagtaag actttataac agaattttca 180  
atcctgcccc aaggaaaata aactatacat atagtccaat ttaaaaaaca aaaacaaaac 240  
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gtgctccagg gacgacggcc tgacagagtg aggacctgga gtgctctctg agagctcctc 360  
ccagaaacgc cccagcatct gcagcttgcc ctctgtggc gcccaactgct ctgcagttga 420  
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<213> *Rattus norvegicus*

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tagtagcatg tctaaaacc aaactctaaa acgttttaaaa acatttatat tagtttggtc 180  
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<223> n = a or c or g or t

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<211> 506

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI072959

<400> 696

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<211> 242

<212> DNA

<213> Rattus norvegicus

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<400> 697

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cagctagcac tgaatcgag ggctgcgaca caatgctata ctggtgtggt gtcagtagca 180
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ta 242

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<212> DNA

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tctctgaggt ggggctgtcc aggtccagcc tgttcaggct tcacagccac acccacatga 240

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<213> *Rattus norvegicus*

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aagcaattgg tcagtctttt gggtaaagga taacaaaaat gcaaaaacag aaattacatt 300  
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<213> *Rattus norvegicus*

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gaacaacaac tacagaaaag atactgtata gaacacagtg gacattaaac tgacagtagt 180  
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agtctatttt gacagctgcc tttcatttgt tattggagag cctcttccag caggttcctt 420  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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<210> 704  
 <211> 451  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI101006

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gctctcgagc ttagtataag cagaacaagg gactccaact cttgctttca ttgttctaga 180  
aaatacaaaa gctttgggtcc caatttacac taatcttaaa ttttgggggg ttttcaaacg 240  
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acagcaatcc tcctgcctaa ctgtcctgac tgctgggatt acagggtgat gccacacccg 420  
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<210> 706  
<211> 537  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI101130

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ttgttggtcca aataaaaagca atgaatagtg atatatttaa tgccaattat tacaaaactt 180  
ttagagaaaa ctcagttatc tctaacatgt tctgctaaga gagagaaaaa aaaacgtatc 240  
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tcttcaaaca gcatttcttc tgttggttaa ctgttcttac tgattggctc tcgcagtagg 360  
gaatgaggac atacagcact tttcacactg ttcagtaaaa ccatataaat taaagatggg 420  
tgctaagctt aatattttat acagaaatgt gtaatatattt atttaattgg actgaatata 480  
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<210> 707  
<211> 565  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI101159

<400> 707  
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agcgccagaa acggtatggg aaggcagtggt ggtccatcct ccaagtgggt ttgagaccct 180  
gacctaaaag ctgatccaag cttatagtca ggtccactgt ccctaaggca ggccgagatt 240  
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tagctgggac tctaagttcc tagctctctt gggggccctt tcaaattctt ggactgtttc 360  
cccgcaaacc aaaaccatt cagctggtag caagtgttgg gcagggactc taccacctct 420  
caaccctgtg acagcccaag tagatggtag aaaggcccca gagcagggcg caccatggtg 480  
gtggaattct caagaagggt gctcatggga agctctaagc aagcatgggt attcccttga 540  
gctcgttttc ttcctaggac cttaa 565

<210> 708  
<211> 560  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI101167

<400> 708  
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tgaactaaac ttttagaaga caattaaaaa taaaaatata ttaaagatat aagtcatgac 180  
aggatatcga gatggcttac aagtgggtatt tatacatttg attataacaa tgtatagatt 240  
tttacaagaa gctgggacta gggagttcct aagaaatcct agattttgta cagttaatgg 300  
ccagattaat aatgtctcaa gtcctaaagt ccttaaaatg ttcttccaga gtccacaaaa 360  
gcaagcagaa tggtgtaaaa atattcttag ttgcatatat cttttaaaaa aaatttgaga 420  
ttattcagta tgccttacat agataccatt aattgagaat cgctgaggtc tccagtgact 480  
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<210> 709  
<211> 579  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI101205

<220>  
<221> unsure  
<222> (1) .. (579)  
<223> n = a or c or g or t

<400> 709  
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taaattgtaac aaaaataaat aaggagaatg tattcatata aaataaaaaa aacatagtaa 120  
aaggccaaat gtttataatt gaacaaaact gtgtaaacaa acaataatgt aagcagataa 180  
tttaataactt tcttagactc ctcatcttgt actctgatgt ggacagactc agtaccaaac 240  
ttaactaaag gggacaatca tgattactat gcatgacttt ttcctgaaac ggactgacct 300  
tgtttcaatg ttttatttgt tccttcaaag catctcactt ttccttttac atctgttgaa 360  
acccttctga agttttactt catgaaaact gtgaatttag ctttacaagg agaataaatc 420  
cttttctttt tttttaattt aaagaaaaat atgagatcca ttacacagca gacttatgtt 480  
ttacatctta caaaagggtt tgcattttta ttaactgatc cagcgtcaca ggatttctta 540  
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<210> 710  
<211> 349  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI101226

<400> 710  
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gagctttgga tcaaaatatt attggaaatc attgaaaatt caccctgttg tcaatgaatt 180  
gctcaaatga tgcattgact gacaatgtaa ctgatctcaa caccacaggg agacctgat 240  
gtgtaagtag agccctctga gagacttagg taggtcaaat agggagagctg ttaacaatat 300  
ggcttgacctg tcccaaagtg gagcactgaa gctagctact gacagaagc 349

<210> 711

<211> 473  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI101229

<400> 711  
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 acagtattaa gtattcaagt aaagttgtgt gttaaaatag gtgcacaggg gtaataaaca 180  
 ctgggatctg gccttcagag aggacaaccc atgggacccc atttgaaggt tgttacatca 240  
 cagaataggc ttgcttacat tgtgcgtctg atctttattc tcctacaccc cccccccca 300  
 gtccatgaaga acaaagatag agaaagaaga atcacttgct acgaggccct gcttcaaggt 360  
 ccctcagatg gaaaaacaga cgaactctgg tacttttagtg agcccacta cctgggagac 420  
 atgactatca ggcttatgtc atttgagttg ataattactg ccaagaagtc ctg 473

<210> 712  
 <211> 374  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI101256

<400> 712  
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 aaaggaacta attggcagct atgtacagtg ggacacaatt gtgtcatgta cactacaaag 180  
 tctttacaaa ataatcatct taggtcaaca gaagatcaag caaccttcaa tgcgtcctg 240  
 taagatgggt tctttacacc tctgctctc ccagcgctct cctttagtag ggctggtaat 300  
 tgttctgggtg attgccaccc cctcgggatg ccttgccata agtgctctgc tgaccgctgt 360  
 agtctcctcg tgcc 374

<210> 713  
 <211> 464  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI101262

<400> 713  
 aagggatgtg cctttaattt ttattttatt taactttaat ttatttttgt tttatgtgta 60  
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 gaagaaagca tctgatccac tgggacgagc tataggtggc aaaggaggc actatgtggg 180  
 cgctgaggaa gcagatattg aatgagtgtt atgggctggg gagatggctc agtgggttaa 240  
 ggtgcttgca gccaaagggg cctggagggt aaaagaatag aaccaattcc tgtaaggtgt 300  
 cctctgacct tcacacacat gctgtgacat gttgacacac aatacccata agcataaaag 360  
 aagagctgtt cagggttagg gagacagctt agttattaga aaacttctgg ctacataaga 420  
 ctgaggacct gagtttgatc cccattaccc atgtcaaagt ccag 464

<210> 714  
 <211> 391  
 <212> DNA  
 <213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI101362

<400> 714  
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 tcaagttagc agcaattgac gtggaagcgc ctgcttttct ttcctaacac tctgcctttc 180  
 acacacagcg ggagcagcgc ggagcagctc cttctcacat gggtttctca cgatttcctg 240  
 gtcctccttg tgctgcagga cgctggagga cattccatac tactttggtt ctaaggactt 300  
 taaagaaagg aaggatgctg tttttctttt tgtccaacat cacgaaggca aaaataaatt 360  
 gcaagcagcc tcggttactc agaacagaac t 391

<210> 715

<211> 210

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI101443

<400> 715  
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 actgcaaacc ttttggggag ggcctgaggg aggggactta tctggatcat attgcacact 180  
 gccctgacca atccttcctt tttgcccaaa 210

<210> 716

<211> 590

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI101500

<400> 716  
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 tgtccaacta ggtgactgga tgccttgac tataggaggg acagcagggc catcctgacc 180  
 tgacattctg agcaagcgtg gttagatgt cagcataagt gtctttgagt caggacacct 240  
 gtgacatcaa cattacccat cacactgata aagtataaaa ctccatactc cctaacatta 300  
 ataaaatagt gtaaaaatat atatcacata tatataaact taactccctt tcttgaaaaa 360  
 aaaaacttag taaaaactag tagtaatagc atattattcc tttcaagttt aagttgtaca 420  
 ggcttccttt gttggttggt ttggttttag taagaagtct aaaggaagag ataatttaac 480  
 catcccaaga tggccacacc cctaaaactgt aaagttcaaa atggtcagta gtatgttggt 540  
 gaggaagagc tgtttggctc aatgttgtaa ggctattctg tctactgatg 590

<210> 717

<211> 182

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI101534

<400> 717  
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 acaacaggaa aatactcact gagtgaatgt ccggtccctg atttgtgccc ttcactgcac 180  
 tt 182

<210> 718  
 <211> 465  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI101582

<400> 718  
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 ggggtgaaact ccacagcata gctgactgat tgaggggccat ccagaggcgc gctaggatcc 180  
 agtgtggcac tgaggaagta cacagcttgc ttgcagtggg ggttccagca gcagtcccc 240  
 ttgtcctctg cagggttcat gaggccgggtg ctgaccgtgc tatctggagt cagctgggtat 300  
 tccatccaca ggacagctcc atggetcttc ccgggcctcc tcagttccat cagccccctg 360  
 gattgcatag gctgctgggg gatgggctgc tggaaatcaa aagtcaggat ctgtcgaggc 420  
 tctgagaggc ttctgcatgg gtattccac agtggctgtg gctct 465

<210> 719  
 <211> 453  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI101708

<400> 719  
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 gtatacgaag atatgtacag tgtgtactaa ggatcaaact aaggtaatta tatcttttcc 180  
 ttgcttactt ataattcctg atttttatag aaacaaaatg atttaataat aagaaaatta 240  
 ttttttaaat ataaaataac tgaaacaggt gcagcattgt ttagatcaac atttgaaaat 300  
 aaactcaaac tataggcagt gtgttggttc tcagaccttc aattgttttc tccttcagct 360  
 tctgaatgct aactatgaag gttaagactg tctaggaatt acatatcaaa agaagtatgt 420  
 atgagcaggt agtttgaaga ctctctaca agg 453

<210> 720  
 <211> 595  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI101901

<220>  
 <221> unsure  
 <222> (1)..(595)  
 <223> n = a or c or g or t

<400> 720  
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 catatataca aaatcatgca taataaaaaa taaaaactgt atacaccatt catggtcatc 180  
 tcttttagtg actggatgtg attacaattc actggagtga ttacagcatc catcactcgc 240  
 ctgccctgta aacagtgtct gcttcatctg tcctgtgatt agtgcttcca acagtctgtc 300  
 tctgacagac gccttcccaa gcagcttctc cgatttgctc ttatatactg gcatgtagag 360  
 aacatttcaa ctgatataat atagagattg ccacagcaga tgcctggctt tagaaagtta 420

tttggagaac tagaaaattc tctacatagg attttctcta atagagaaaa atatgcattg 480  
 atggatatgtg aatacgtaat ttcaggagtt agaactgaag aatttaggat ctnccttcc 540  
 acctgcagtg aaagaagggtt aaggatctca accccataaa acgtgattag taatc 595

<210> 721  
 <211> 484  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI101921

<220>  
 <221> unsure  
 <222> (1)..(484)  
 <223> n = a or c or g or t

<400> 721  
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 gaatcaggca aatcacgaat gcataaatac cacagcacag ccagacttgg ggggtggggtg 180  
 gggtcacagg ccacagggga ccatgcttca aaggcagtc gaggcattaa atacaggggc 240  
 taaacgttag agtccatctc accgtacaca taactcatac attaaaagta aggagaccac 300  
 ggtatgtacg tgcaagcagc tttggtcaga gaaaatgaac aaggggaggtg gagccatgca 360  
 caggaagggc ttgcctgtct actctccatc ttcttcatcc ccacaaagtc acctgggac 420  
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 gcct 484

<210> 722  
 <211> 551  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI102009

<400> 722  
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 aatttagcaa tgacattcat cacaagcctc aacgctctag tctaaaaggg ctcttcagaa 120  
 tccacttcac aaagctttgc acagaacagt ttaagcacca gtaagactgt tgtttagcagt 180  
 gctcttatcc cttcactgtt acagtcaaac atgcaggttc aacctatgtg tctgaccctg 240  
 taaaatggat gccacactca gccttgtggt acaaagtta taaacacaat ataccaatac 300  
 aaagttgaag ccattaaaaa gagcttaata acaactacca ggagacgatt aaatctggga 360  
 agttgaggga atccgaagag gatttggaag ggacacgcag acgtacatta cggtaaatgt 420  
 tttactggga agaggtgcga gggaaacttc tttgcgcttt ggaaagactc acttgctccg 480  
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 ctgggcattg c 551

<210> 723  
 <211> 384  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI102017

<400> 723  
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gaccacaaaa aagtacacaa agaacgttat cctccaaccg ggcacaataa aaccttcact 240
aacattctgg ccccgctctgg gggcctatcc cagaggcccc aactccagaa attaagtaac 300
tgtcatataa tacatcccac ggctaaaggt ttgttacatg gagattatgc atgtgcctcc 360
ttttccccc gaaaatttat ttaa 384

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<210> 724
<211> 625
<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. AI102045

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<400> 724
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aagcaagggtg gtcaaggatc ccatagccca gtcacagtgg gaagcagacc cctcccccttc 180
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ccagacctgt gacctcttct cccctgaata tattttaacta atgatgtttt ctagaaagag 360
ggactgggga tgtagcttag ctgggagtgt gtgcttaaca cacacgatgc cctgggttgt 420
tcccagcacc tcctaaagca gcaaggatgta cacacctgta accccagcac tcaggagggtc 480
agttcaagat cattcctggc taaatgtgag ttgaggcccc tgcttggaat tcatgaaacc 540
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agccccaat ggaaatggct cacac 625

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<210> 725
<211> 615
<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. AI102093

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<220>
<221> unsure
<222> (1)..(615)
<223> n = a or c or g or t

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<400> 725
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atcaggcggt gctgcccatt cagacgggct ctctcgtggc ggcgccaaa gagcctacgc 420
cctgggctgg ggacaagggt ggggcggctc ccccagctgc caccgcctcg gaccggcgcg 480
gacccccacc actacctctg cccgggccgc caccctcgc gccaccgcc actgccggga 540
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gcnctcggg agcct 615

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<210> 726
<211> 485
<212> DNA
<213> Rattus norvegicus

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<220>

<223> Genbank Accession No. AI102190

<400> 726

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tacaaaacta accagtattg taagttattc cccctcagga aataaaacat actatgattg 120
tcaaagctag atgtcagtct aagattttaca acaaaggaag aatgtgaaac taaggaaaag 180
aaaaagcaat cactcacaat gaccacaaaa aaaaaaaaaa aatccaaaga gtccggttctt 240
tcacagacat tgattgtctt ctctaaatta ataaagatta ttttaacata aactgtatta 300
aaaaaaaaacc cagaaactct tcaagtaact aaagataatg ctccaaggcc attttcacag 360
ctttttttgt ttgcttggtt gcttgcttta aatgccatta cagccaaatt aacatacatt 420
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agcac 485
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<210> 727

<211> 552

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI102258

<400> 727

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attggcactg ttgacgggta ctgtaaacaa gatcacttgg tttgcatgag tctgcatgag 180
tcggaagctg tgggttttcta cagtgaactg atatatatgc atacagagat agggacagat 240
ctattagtac atggatgtgc acagttttgc atgggttactg agcatcagta aaaattataa 300
aaaaaaccac ccatttataa taaaaaggga gcatatgcta agacttgcta gtactgggccc 360
tcgttttctg cacaactggc aagattggct aaagctgggt actaaactct actgcactaa 420
tgcattgatg gtgttcaccc agaccttccg aacagatgcc ctgattttgt gggtctgccc 480
taggcagaag cctgcccact aggttctctg tgtttcatca accttctcta agttctacaa 540
tcttgaattt tg 552
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<210> 728

<211> 625

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI102560

<400> 728

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taaggtaatg gttacttacg taagttttaa ccttatattg cttggccatt tttttttaca 120
tataaattat tgcttcctac tttgataaat acacagcaca gtcataatac cagaggcaga 180
gaacatgaac tatgagaaaa aaaaatcaaa cactgtcaat ggcagtctgg taagtcaacg 240
aatgtttcat atttaccagc tcttataatg gtggaaaact acgagggtga gtccttgaga 300
agttaggtag atgcccggcc tgtgggcttt ctatcttcta attgttatcc caagctgaca 360
gcatcatggc agtcctaagc aatgagacgt ccaaaggcaa gagtccttgc ttctgggtcat 420
tgattttcatc ctggtgttta ataacagcgt aatacgaata caaataaata ggctatgcaa 480
ataaatattc ctctgctaaa aatgcttact tagtatatac agctttgctt tatacagtag 540
tacatttctt ccgacttttt ggcaattttc aaaatggggt ttccctagag caaaacgggc 600
ccactcagta atgagtgggc tgaaa 625
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<210> 729

<211> 405

<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI102562

<400> 729  
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cggcaagact ctgagttggg ccggaaatta tttacacctg agggcagcag cactgttcgt 120  
cacttcaggc acagcacgtg cacttgtccg aggcaccttt gcaaacacag ccctgggcac 180  
atttggagca gcccacgggg cagcaggagc agcagctctt cttgcaggag gtgcatttgc 240  
agtttttgca gccgcaggag ctggaccagg tgcaggagcc gccggtggag caggaccagt 300  
tggggtccat tccgagatct ggtgaatctg gagcaacggg gtaagctaca agaaggcagt 360  
ccctcgtgcc gaattcttgg cctctagggc caaattccct atagg 405

<210> 730  
<211> 564  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI102576

<400> 730  
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gaaggggaaa cttaaaggct actaaggagg gttagggga tttcaactta ggacaatatc 120  
tatgagcaaa aagcaatcac acctgcttcc cggatttgca ttaacaaaac accatgtgaa 180  
gtcggggaaa gacacgctgg tgcacctgc cctgcctccc acctgcttaa gatggtgcta 240  
ggatcctctg agccgacccc tgggcatgtt agtcccctgg cccaggacag ttctcaactc 300  
tgacaagctg ctgtgcaggg gaagaggtag tgtccccttg cagtcagttc actgctgaca 360  
ggcttaagga catggcaagg aaaggacat cactcttttc tgggtccctga ttggtctatg 420  
ccacatgcca tggtcctgt cctgggcata tgcccctctg gctctcttgg cctcataagg 480  
ggtacttcaa tgagtctggg caccaagtac aggataaaat tattcctatc ttttaaaaaa 540  
aatggccaaa aaggctcttt tggg 564

<210> 731  
<211> 478  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI102578

<400> 731  
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aaaatcaaca ctataaaaat aattcacaat attaattgtca tcgacaagtt aacatctaca 120  
agcatacaaa ggctgtgtgc attgcttgcc ctggccagct cggtaaagca agtacctggg 180  
aaaggggaca gaggagagac ttcagatccc agcctcgaac catgaggaag caagcctggg 240  
tcagggtgta gcagggtctt catggctgga gggaatggga taagtgaggc tttgcccctg 300  
gccctaggga gctggatggg gctactcagg ccgttaaaaag gcagactaca gtgtagggaag 360  
gcaaaggctg ctctacccaa gacaaataat cactggcaag aaatctctca catgctcaca 420  
cgtcaactcc ctttagtggg gtctggaccc cactggacca acatctgtcc aatcatgg 478

<210> 732  
<211> 547  
<212> DNA  
<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI102634

<400> 732

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acattgtccc agaatagctt gaggtataat tcattcagga actatccttt gcaaaggaga 180
tgatcagcat ttcaatagta tgtcttcctg gaagggtaga ctctgctata tcttccttgt 240
ctgcatcaaa agactccaga ggaatgtgca cacacctcat atcccacttg tagagcaagc 300
cttccagtga ccagtcagca cttctgacct ggtatgtaga ccagaattga actttgggat 360
tcttctgcat cagaaagtat actgtggcta aaatgctttc aaagtcttct ggttcaaaga 420
aaacatcaga tccaagaatg atgtcttggt gtggcaatga caaagtgtcc tttgatatgt 480
ggccccacgt cagtcctaca atttgcacct gtggcaagtt attcattctg gcaactttgc 540
caacaaa
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<210> 733

<211> 581

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI102739

<400> 733

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ttttttccct agctacctgc ttttctgccc cttggaatct gtcgctgcta aacgaggggtg 180
ttttccaagg taacgcagct gtaagagaag gaactgtttt atatatctat atttcaaata 240
tataaaaatt gaatgactca aatacaccgg tgttctcatc caaccaccag agtggttaagt 300
gaagcggagg aaagaggcac aggaagggtg actgaggtgt ctcccctgcc tgcccgttcc 360
tttaacttct caacagaagc caggcagctc tggaatgctc tgaaacggat ggtggtacat 420
acggattgga aagtggcggg caagggcaaa caaaaactgc tcccacatca tctttcatta 480
aaatccaaag agaaacgtaa gccacacccc tctcccgccc aagccatcgc tttacacaga 540
actgcattta gcttctgtgt attttgtttc tttagttata t
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<210> 734

<211> 587

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI102750

<400> 734

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tttttctcac cccccaatac acctcacaag gaggtatgcg gactgcctct caatggaagc 120
ggccctggcc tctgccccgg ccagctgctg gagctggagc atccacagtg gagcgggggt 180
tcttgatagt ctcatccaca gacacaatca ggcacgcagc ctccagaagct gctgtcagag 240
cgttgatgcg caccatggct ggctcccaca caaatgcctg gaagttgtca gcaatgtcct 300
cgttgttgat gtccacccca taccacatgc cccctgtgct atgtcgagcc cgcagtttgt 360
tgaggatggt tgtggcatca aagccagcgt tgtcacacag ctgtcgtgga ataactctca 420
gggccttgcc atatgccccg atcaacattt aagagggcaa tcttgggggt cttatacttc 480
ttgggctgca tttcaaaccg agcataagag aacgtcttct tgaacgcaac accagccact 540
agtcgagact cctccagggc tccaccctgc accttcttcc tcgtgcc
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<210> 735

<211> 700

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI102753

<400> 735

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ttataccaac cttttcctat taatgcagtt tctgattaga actaaacatg tctctttctc 180
aatttaattt aggatgaagt aatagaactt ttatgatcaa cttcataaac tgtctttaag 240
gagaaaacga atttttaagt ggggtgtcacc atatttacca gtgaactggc tgcattggtg 300
ccttgtctcc ttgaagtctg gctatcatta gaactaacia gatcaagtcc atgaggccct 360
cggggaactc aatggctgtg acatccaagg ggagggcaca taccatacat cacaatgatg 420
aaagttaatg ctcttaccct ctgagtccat gtaaaaaaac ttattactct cattcaaact 480
aactgaagtc aaacagttta aaagtcagaa tgaagaataa aactattttc ttttcacaga 540
gaggaggggac actccttcag ctccatttaa agtgaattct gtgctgagtc cctgctcctt 600
cagaacagta aactgaaagt cagttattgc tagcaaagct ccagtgggtc ctttcctacc 660
tcaaagatgt tccacacaaa aaggctattg gtttgacttg 700
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<210> 736

<211> 531

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI102812

<400> 736

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agaaggaacc ccgtatctct aggcaactgcc aaggaatagt tcaagcctat gcagatacag 180
aagagaaaagc ttccaattta gtccaaaagga aattttactt ttcatccata ttaatgtgga 240
aatagatgct tcaggaaatt taagttttca caaatacaca caccacaggg ccaggtagct 300
ggattctctt ttgtaaagac cacagatcat gttaattagt tctaccctcc tcagtggatg 360
gtcaactcac cttcctatat aaacacacat gagaatttgc accaaatctc aacagccagg 420
caaaactcta gaactcaaaa attcttgaag cttatacttt aaaagtattt ttttaaagtg 480
acaggtaaac aaggaggcac ttgaattcaa aaaacaaaaa tcaataaaaag c 531
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<210> 737

<211> 565

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI102820

<400> 737

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ccggttaagaa aacaagggca ggagattgga aacaagatgg tacatgtatc catctatctt 60
cactaagcga ataaagttca tctgggtgcaa ctgtttgttt caagatgtag acaactgtca 120
ggggaggaca cacatccttc catgccctaa cccctgccc gcccacaaact tctacctcac 180
caccaaaagt ttggccaata ggctgaagcc ccacaaagga atacttgaga agtgacatgg 240
cacagagaca tctccacaga ctctgggtgtg ccatccctaa gtgacaactg tatcgcttca 300
gaacttaacc cccaaccctt tttctaaaca ttttctctgt tgggggtggg aagaacttca 360
gttaccatc aactaagaaa gttaaagcagc cacatgtctc ttcccacatg cactgtcccc 420
agcttcttcc tctgaggagt gtcttgcttc aactcttcat gttatccctt tagtgtgaaa 480
cctactacac ccacaccatt tacaaggcgc accaggtagg catgggggtca gggcaggcat 540
agctcctaca tacaggaaag cttgc 565
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<210> 738  
 <211> 489  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI102868

<400> 738  
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 acagccatgc gatcacagtt tgggggtggg ggtgtaactg agttttgttt aacggtctaa 180  
 ccgaaaagca aagaaacaac cattttcttct acttgtggca agaaaagtta atcatggaac 240  
 tcctagatcc ttctcatgaa gcagctttaa aagaaatcgc ttctccagag cttcatcccc 300  
 tttgctgtta ccaatgcgaa acggaatggt catcctgctt ctattctggc gctccaccgg 360  
 acacacataa aatccttgag aattatcaat aatctcataa atcatttggg atttgacgga 420  
 gctgagcttc tccatggctg cggacccacc attgttactg atccattcca ggatcatgcc 480  
 catgacgta 489

<210> 739  
 <211> 562  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI102871

<400> 739  
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 ataccgctcg gcccactca ctacacaccag tgacatgtga gggtcagacc cctaaaaattt 180  
 aggcagctgt tggggaagaa ctgttggttt tcaatctttc ttagaaaaga aaaaagcaca 240  
 gggatgcact tggccatcac gatgctagcg atgtttgtgc actaactcat ggcagttaac 300  
 actgagaact cctcctccac tccacacaca gtgacatcag cctcagtctc agtgctgctt 360  
 gtactgactt ctcaattcac aggggctttc ccaaaaagta attcaagttt atggaagtga 420  
 aataaggcac aattaatatt gttttgacct aacggaagga aaggaaagaa ataaaaactgg 480  
 tttcaaaata tcttagctgg gaactgttga ctttaattcta ctggaaatcc cttcttcaaa 540  
 tcttataaag acatttttcc ct 562

<210> 740  
 <211> 585  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI102905

<400> 740  
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 agtgattaag atgctggatg aatagccaaa gaatattatc aaataacaaa atctcaacaa 120  
 caatttatca aatgaaactt tactgagaca taagagaata tgtgttaaga gttaacatgg 180  
 ctaaaaatga gacatcacag aaatagtaag tccataaacc tagaacaggc actcaataac 240  
 agaagtgatt aggtgagcac acactacaaa ccggtatttg aagcagcttc tagaccaaac 300  
 acattggcag gaccagcagc gaggcaggctc attcaaccaa ggcatctggg aatagggagg 360  
 agatctcagc caccttctgc ttctactccc ttgtgacaaa gggggagggg gaggctcaga 420  
 gagctgatgt tcttggtcct aagtcgcctg gccaggact gacattgacc accggaaaagt 480  
 gctctattcg atttaacttg acatattttt cctactgaca ggcatacgat gaaagaaaac 540  
 aacaagcttt atagcatagt tcaggatgac atttatttcg ttgga 585

<210> 741  
 <211> 573  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI102943

<400> 741  
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 gggccaatcc atccccatga cccatcgga cagagggagg tggcacatgc cctgtgtact 120  
 tcttcagtgg caggtggcac tggcctcaga cccgtaacca gctgccagggt taagagtagt 180  
 gaggggaacg agagtgccca gggccagggc aggaggctga cccccctcgt cctatgacac 240  
 gagtgccacc aggggtggcag ccaccactgc tgaaccgagg cagcctacgg tgggtggggg 300  
 gagccaggcc tcagcagggt ctagagggat gcaagcagct ggtctggact cccagaatg 360  
 tatctcagggt agggaaactg agggctggggg ggcagtgtag aagggtgggga gacctcagaa 420  
 ctgcacacac tccagaccag ggccaactcc tgctcagtca ccatcactgg gactgagcga 480  
 agggacgctt gcaggaaggg ccagaaacctc acgtggctca aatccagctg ggggaccagg 540  
 tgggttcaat gggggcagaa gtgacaacag gcg 573

<210> 742  
 <211> 394  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI103071

<400> 742  
 actgtgaaat ctgtaataca gaatgattct ttattttgac acattttcaac tgtgaatata 60  
 acttggtaac taataagaga tggtcacatg aagtaactca agccctctta acttctcagt 120  
 ggattcttta gccattacaa atggaactga tggtgacaga ccttaagggc tcccagtaac 180  
 ctgctgtcct gcaaaaaggaa acaatgccca tccactccat tgaaacagaa ggcataatta 240  
 tcgaacagtg cctagaaaac agagggggacc gagaaaagta cagtgttgcc tgctaggaaa 300  
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 tgcacggaac tgaaaaaaaa aaaaccctcg tgcc 394

<210> 743  
 <211> 489  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI103078

<400> 743  
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 ggctgtgtg ggtcctggcc ctctcggtgc tttaccactt agaacctaga atctaggccc 180  
 agatctctac acagtttgat gctatcacia agtgggggtg ggagagggct ctctatttg 240  
 gcaagctcct gcagtagcct ttctttgagg gcagtgaccc cgactatcgc tgccctgggt 300  
 taatatatac agtagcttca tagctcagat gcctatgtcc ctttgacagc ctctgagtc 360  
 ccaggggtact atgactagac aaggggccagt cagaggttgc ctctgacaca cctgggggca 420  
 gtggggcagt gtctcaccac ctgttccctt tctccagcgg ttccagtttg tggaaatccc 480  
 cctcgtgcc 489

<210> 744

<211> 432  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI103097

<400> 744  
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 caggagcctt tcggagaggc tatgaccggt attacaacaa gtacatcaac gttcggaaaag 180  
 gcagcatctc agggattaac atggtgctgg cagcctacgt ggttttcagc tactgcattt 240  
 cttacaagga actcaaacac gaacggtgac gcaggtagca ctgaagaggg gtcactgtgg 300  
 agaacactgc atggccgagt gtaaccgcct ggcccgtctc gatctgctta accttcacac 360  
 cccaaccaag aactagggtc caataaaagg tgacggggact gggttcacgtg aaaaataaga 420  
 aaaaaaacct tt 432

<210> 745  
 <211> 586  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI103101

<220>  
 <221> unsure  
 <222> (1) .. (586)  
 <223> n = a or c or g or t

<400> 745  
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 gttcaggctc ggagggttca tcatcagtgg taccctgggt ctcaggctgc agtggggatg 240  
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 acacatcacg atttttgctg ctgatgacct ctgagccctc tccatcctct ggcagagggg 360  
 gcagtggtag gccaggtag cgctcgcgct ctcgcactgt agggctgtta cgcattccagg 420  
 cgcggcagat ggggtacaac ggtgtgttct cactgaactg ggccaagtcc aactcccgtt 480  
 caaacagctt gatcacatac gtattggatc tctgaggacc cccctcagca agcccatcgt 540  
 ccatctncct tctcttcttc ctccgctggt gagggaagcg ggccga 586

<210> 746  
 <211> 479  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI103159

<400> 746  
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 gtgggacaca gggcagctag aatccagaat gtggcgcttct ttgtgaaagc gactgaaaga 180  
 ctaccacaga ggtggttagag aaaatgatga tgcagataat gaccatgagg aactgaaga 240  
 tcaggagact gatgttcagg cacttggcag tggaggcgta ggccctgggt ccaatcacat 300  
 tggccaccat ctccctgtcc ctggacttca cagagtaggc ataggcaatg aagcccaggc 360  
 agcaggcatt gaagaagagc gtattgaaca gggaccagac cacatggtca ggcacagaaa 420

0991300.0310  
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cctctctggg catgttgatc acggcggtcc tcacgacagc tgacttggtg gggtccccc 479

<210> 747

<211> 498

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI103224

<400> 747

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tcttcactaa agtagccaca gtcttctcag caagccccgt ttccactacc tatcccctag 180
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gaccacactt tgaccacacg gaaagcagga acttaacact gggcagagct gattttgtga 300
ggtgaacaag atgttgccgg tggcaaggaa tggcgacaga gacaagggtg agtgcaccct 360
tccacacacac ttgccctggt aggtgtcttc taggtctctca gaggcgataa ggggttcctt 420
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<210> 748

<211> 501

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI103246

<400> 748

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ctgacgctgt cacttccttt gtcttttggg tttctgaggg gctttctttt tcttgaaatt 180
cttctttttc ttgatgatac ttttcacatc tctgttgttg agccaatcat caccgtcagc 240
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cgtatcaaac ttggagccca tattttcatc caacagatga ccaaactctt cagcagagac 360
aaacaggctg gagtcattga aacttttctt ctttttcttt tgtccttgaa atgaccagc 420
aaagtcaaaa tcattctcac tcttctctct gcttttctta gtactggcct tggggctggc 480
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<210> 749

<211> 405

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI103548

<400> 749

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gcttcagatt ttcttcttta actgcatcta ctcttgaga aagatcttca agtgtgtgct 180
ggagctccaa cacctgatta atgagtcgag tcttttcttc cagttccact tgattttcag 240
catcaactgc gtccatgtca gcattcatca tcttggggaa cagacgttca gctcccgaat 300
gcaaactctt taatgaatgg tcttgcggtt gaagcgccgg gaaaaggcgg gataggtagg 360
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<210> 750



<211> 514  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI103550

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 gtggtggata tgggcaagtc acaaaagtac gtaagataca ccactgttat cctgaattat 240  
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 ctatgtagac cgacctgaa ctaacatctg cctgttgagt gctgggatcc catggtgggc 360  
 tgtcaccaag ccagcttca taactacttt tcaccacaga tgatcttaag aattctaaaa 420  
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 <213> Rattus norvegicus

<220>  
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 aggcacaccc cgacctgcc attctaattcc gcgaatgttc agagggtgag cccaagctct 180  
 gggcccgtta tgcttttggc caagagaaga atgtgtctct gaacaatctg agtgctgctg 240  
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 ggttcttata aagcttacgc tgtacagtgt tgcttcagaa tgttctcttc attacctttt 420  
 ccctcttact gcgcaaacac tgaggcaaag tagctttata taaaaatact atcttatttc 480  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI103708

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 gagaccatag aagaaaatgt tacacagacc gaatccaag cgttgcgat ttaagcatca 180  
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 agggcctgat accttggtca gccaccaaac actcttggtg ctacagcaac cagtttgcaa 420  
 acagaaaacga tacaggataa accaaggctc tgtgataaca tcagggctaa gtatcccttt 480  
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 tacctgagat gaggacagtg atggacatta aatgc 575

<210> 753

<211> 573  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AI103730

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 aatccaaaaa gacataattc attctgagtc cagatcagag tcagggtcac ccacggagac 180  
 ctctgcagtg ccagggtgtc caagccaagt tcccccggtg aggaaaaccc aacagactac 240  
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 ctggctgtgg tgcccatgct tttaaagaat ccg 573

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 <211> 398  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AI103758

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 gtcttgctag ccaagaagaa catagctttt taaatgccaa tgaatcacat tttccacaag 180  
 tattaagact ttaatgtctc cgaataacaa ctttttaaaa tgcacttctt atttattttt 240  
 gggtttttcaa gacaggggta atttgtgtag ccctgggtgt actggaactc actctgtata 300  
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 ggcatgcacc acaccactgc ctgtaattta agaatttg 398

<210> 755  
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 <213> *Rattus norvegicus*

<220>  
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 tcagagctga gaacgaggtc ctccaggccc aggtgggtca gtcctgttca ggggtgggag 180  
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 gtggagatgc atggatagcc accgatcgca gccgggtgctc cagcagcagg tccaggctgc 420  
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 gccccaccgt gtggatgaca tgcttagctg gcacccgata gccgcaagtg atcttggtct 540  
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<210> 756

<211> 590  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
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 ttgtccaggg tctgccatga ggggcctgga gcctcactag atctggcagc taaaggctct 240  
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 aaaaataaat accgttcaat agactgcctg ccatccagcc tgaacttaca gggcacagcg 420  
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 agttatttga atgatccatg aggacagtag acaggaggat cataccagag ctataacgat 540  
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 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
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 ccatgtgggt gctgggattt gaactctgga cctctagaag agcagttagt gctcttaacc 180  
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 tgcgttgatg cactcctctg acagccacct tgcctgtaaa gtagtgcaact cctcctcgtt 480  
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<210> 758  
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 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
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 tggtcacaga ccacattctc atgttacaag attcacatct ctggtaatcc aaggactgtg 180  
 gtacaaaagg aacacttcat agctggggtc actacagttt gctagaaaca tcagttactt 240  
 tagaatactt taactataaa atatattgaa ttccatata ttaaccatat acatgtgtac 300  
 ctattactaa atgtagtcag ttgttacaaa ataagacatt ctgagagcag gctacacaca 360  
 cacaccagcc tgaactcccc ggggtgaggcc ctgtgccatt agctgcaact gtccatccaa 420  
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 <212> DNA  
 <213> *Rattus norvegicus*

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<220>  
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 acttttttaa tgtgtaaaagt tagccaactt tgtaatacag taactccaca tggcagtgtc 180  
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 <213> *Rattus norvegicus*

<220>  
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<210> 762  
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 <212> DNA  
 <213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI104683

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<211> 373

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI104798

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<213> Rattus norvegicus

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<210> 765

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<212> DNA

<213> Rattus norvegicus

<220>

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<213> *Rattus norvegicus*

<220>  
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<213> *Rattus norvegicus*

<220>  
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<210> 768  
<211> 575  
<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AI105113

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aaagttaaaa ccgccttcaa gattactttt tatatttaac tgtacaatac aggtattgac 240  
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<210> 769  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI105131

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<211> 570  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI105145

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<210> 771  
<211> 641  
<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI105167

<400> 771

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gccttcccta atgagattag ggtaaaactg cttgtcccag gcgctgtaca gtgatgtagt 420
gacgtaaaga cgcttcccat ctaagctgag ctggatcatc tgaggacctc caggaactcg 480
ttttcccttg accactaggg gctccggctg acacgttagc tcttggtcct ccagcacttg 540
tacagagcct cctttaacaa tgctgcccc aaggaagatc tgcccagtgga ggcgaggctt 600
cttcgggtta gagatgtcat actgcccaat gtccccgtgc a 641
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<210> 772

<211> 531

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI105184

<400> 772

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ctgatgggtt gcaattcagt gatgtgaaaa ataaagactc tttcagaaag tggcatttgg 180
gtccctaact gtaggaagga actgcttagg caggtggaag agaaagcctt tggcctctgc 240
tgatttgtat accaatggag acaactgttg tataagggtt tttgtttgtg tctgaggcat 300
gaaccagggg catcacacat acgagatgac acccctagcc cttctattac atttcaagct 360
acggacagta atttttttct ttaaaacaaa attttctgtg tatcatcatt ttgccggcat 420
gtgtgtctgc acttcatgtg tacctgggtg cctcagcacc cagaagagga tgctgattct 480
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<210> 773

<211> 496

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI105188

<400> 773

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aactcagata tgtacctgcc tctgcctccc aagtgtctgg attagaggca tgcaccacac 180
cactgcctct aattttaaaaa tttgtgtttt agttgtcaat gaacaaagaa catatatctg 240
attcaccagg aaaccaggaa ggaaggcctt taaatcaaac tagaaaactg ccattgttgg 300
tgggacgaat gtgtatgacc agagctgtgg cctgcccatt tctgaacagt gttgctgagg 360
tttacgggtt tctccggaac ttcttggaac aacagggtcc ctggctacca tcggaaaggc 420
acttgtgcac attttcaatt gggaagggtga ctgcaagaca gaggacaatt ctgacccatt 480
atcacactaa tgaccc 496
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<210> 774

<211> 603



<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AI105196

<400> 774  
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caagctcgcc gagtgggcac agggacactc gctccaaaag gagctcaggt ggaagcgctt 180  
tctttaatct tccacagtgg cccttcctg ttcctcaccg ggctatgac tggtaagaaa 240  
accacaacc atcacttttg ggcaacagca tctcactata tgggaataag aaacatgtct 300  
aggaatgaaa gcacaaagct caatgatcca catatccac aacaatcatt acatctgcag 360  
caacgtataa caggagtatt ggatagttca aaaattcttg taaaaggggc caaagaacac 420  
aaaatctggt taaaggtaatt ttctgtaatt aaatgagaaa aattattttt tccatattac 480  
aaatgccttt acactataag acctagaggg gttaaaaccc ttcaaactctg ggctctcctt 540  
tctcagtaaa atgtttggca caacccttga gctgctgttg aaatcaacag ctgatagggt 600  
tta 603

<210> 775  
<211> 572  
<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AI105205

<400> 775  
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ttaacaaaaa tagctttttt taaaaaaatt gtaacaaaaa ggagttatcg cataaacaga 120  
tcatgaatta ttcttagcaa attacacttt ttttttctta aagcattcac cattacaata 180  
agcagaacaa tggaatatta gccattcata tctggtaagc tttagaaata aaaaaaaaaa 240  
aaacccggca aaacaagaaa ccccaaacgt acccccaaac ataaagcaca ttcacacttg 300  
aggatcaaca ccaaccggtt cttcagtga acactgtaaa actctggata cgaggaataa 360  
ccaaggagtg gagcacctgc cgggtgtgtc agactttaga gcaagcattt gaagaaatgg 420  
cogtttaacc ctaagctcct gacctgcctc tgaaacagag cactggaatg ctcaatgcgt 480  
cgtgcttctt gtttctttct tcttttatcc tttctagaat tacctaggct gaaaattaat 540  
accagaaag gttacacttg gctgggtgcc cc 572

<210> 776  
<211> 504  
<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AI105243

<400> 776  
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cccctgctat gtaaaagatc ctttcatcc tctgtggct agagtgatca gaaccatcta 120  
gagtttccac gtgacctaaagg ggcctacact gggctgcaca ggaaaacgag aagtctgagc 180  
gtcacacgct gtggttaagta tctgatggca aggcttcctt ctgtggaggc cacttcccat 240  
gagcactcac gccggtgtgt cacgcctcat cccatccact cgctgtgaag ccttcaacctc 300  
ttcctgtcgc ttggtctcag ttataaccaga ccctcctcgg aggacacca tatccatagc 360  
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taaggcaatg ggaatgagac cagactgaaa ccaatactac tctccgaaac ccagagtagc 480  
tgccatagct acagactgc cctt 504

<210> 777  
 <211> 649  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI105417

<400> 777  
 accttatagc ttgcatatatt attgaacaaa tacgactaaa atagctaaaa tacattgggt 60  
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 ctacgtaaat gccacaaatg cacaataccg tttccttgct ctattttacat agctgatata 180  
 tctagtcaaa caaaaagatt ccaaagaaat aacctcgaaa cgcttgaaa aaaattattg 240  
 cttttctttt tctaagtcag ggggtgagg ctgcagaaaag gaagagttct ggtaggtcaa 300  
 ttacagtttt gtgattgctc ccgctaccgt gactgcacat ccaccaggg ccagtcacga 360  
 gaggacagcc tctcacactc ttggtagcat ccgctcagcc tacaacactg aagaagaaaag 420  
 ccacactcaa gacacaagga aaacaagtca gtccagtcta gagaagaaca ttccgggaaa 480  
 cagagtacca acaccttctt agaacatgga aattaaaaac aactccgtca gagctacctc 540  
 gccaaaggagc atgttgaaag tccaaaattg caccattcat cagtgtctca agccctgtgg 600  
 cagcgtctca gtcacttacc acaaggaaac aatgagtttc aaactactt 649

<210> 778  
 <211> 588  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI105444

<400> 778  
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 aaacagcatg ttcttcagca gggagctggc caggggcagg gggcccctgg gcaccacccc 120  
 ctaccagcag gggaccacga aaagaagccc tttcttctgc tgctgtgagc aaggctggaa 180  
 aaagagggct ctttttttct aggggaagta gccaggatca gaaatactga gatgtgggct 240  
 ccccaaattc cagcggatca acaaatgaat agaattttca tctctccaaa aatccgtcac 300  
 tggtggggcg ggggcgtccc agtcagggga cgatgggtgc gacatggctc ggctgggtc 360  
 aggaactccc agtcccagtg ggctctggcc gctctgcaca cgtgaacgga tacagagggg 420  
 gcttctacac ggtgcgatca acatttcctt tataaacgtg agtggattct ccaggcaaac 480  
 tatgcactat ttcattggtg gaaagaatca aaggaagtta aaatcagagt ggagttaaaa 540  
 ctgtgctaaa ttacagtagt gcttattagt aactagattg caaaagggt 588

<210> 779  
 <211> 380  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI111344

<400> 779  
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 tgctgcagtc atttacactg gttagagagc atctaccagg tcatcgtccg tccactctc 180  
 ctcttctctg ttgggtttct ttgatacata gtcacgtctc tcgtagcctt tcctcttct 240  
 tgtaaccata ttaagtgcaa ggtcagaaga atgacatcgc tccaacttct gtttcagaat 300  
 agcaacttct tcagatctgg gtggctcata cttttttact agatttctca tgcttttcat 360  
 tatatccagt agctgtgaca 380

<210> 780  
<211> 448  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI111401

<220>  
<221> unsure  
<222> (1)..(448)  
<223> n = a or c or g or t

<400> 780  
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ctgttgctgc ctttagagtg gctacctatt ggcaacaagc gccctcagca gagcactgat 180  
gagtcctcag agctcgtcgg acgtgatgtt caccttgggt aggttacatt ctttactagt 240  
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ttcttgaggg gtctgtgcgt cttcacaatg gtaaagcaca natattaggt ttgaagcata 420  
tggtacgatg tgaccacttc ggaactcc 448

<210> 781  
<211> 413  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI111413

<400> 781  
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tgacgatttc cagttaaaac cgagtctggg tggagggtat ctggaaaaca cgaaagatgt 180  
caaattggtgg cgctggtggc agtagcagca gcggcagcag cagcagcagc agcagcattc 240  
tgtgagagga taggtctcag gtcctgcaga gactgcagag acactttgca gtcccaaggc 300  
caccacacgg ggccccagct gataaataaa cagcgccaca cacacacaca cacacataca 360  
cgtgcgctgg aaacgagaga caaactggaa gtctcctgca gtgaaaaaat aat 413

<210> 782  
<211> 465  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI111558

<400> 782  
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catgacaaac tctgttaaag caaaataaat tactctactt ttggacagtt ctggaaatta 120  
agagggtgcc gagagagagc tgctctcttc taaacagggt gcctgctcta ccacagacaa 180  
ggcttgagc ttgatgtgca acaggatat accaaatacc aatcatccag ttttaaagaa 240  
tcagcgtcag aatcaactct tgctttttta catggtgttc cagaagtttc tctacttggg 300  
ctacagaagc aaagccatag tgttacacaa tacttatttc tttaaaaaaa aaaaaatata 360  
tttatttatg cccatgaatg tcaaactcaa gtttcaatta aatatattta tatacaatta 420  
ctttgagcac cttgctgcac aatttaaaaa aaacgcctcg tgccg 465

<210> 783  
 <211> 478  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AI111559

<400> 783  
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 agtgcattgca aaaggagtga agcctttttc tcttcatcat tttttattgt aagaaaatac 180  
 acagtttgaa aggatgaata atgcagtatt tatgaccaca gatagggagc gtgggtaggg 240  
 gaaggagaaa taaacagatg attggacaga gaagacattg aactccagag actgaagcgg 300  
 gaggtgggcg tgggggcggg gaggaacagg aggaggaagt aaaaaaattt tgatcagaga 360  
 aacagttaaa atacaatatg aaaataagca attcctctcc ttagattccc tctatacaca 420  
 aaatacatga tttgccaaag cccaattttg tgctactggg attcctctcg gccgaatt 478

<210> 784  
 <211> 504  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AI112012

<400> 784  
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 tgagatagag ttgatgaagc atggccttta ggtcaggact agctgggttc aggcacatct 180  
 tgtgtagaaa tctaaggagc ctggggcatc ctctcccagt taacctagga ccttaagtag 240  
 cagtgcctc cccctcccc ttcagacaca atgtgccac cctattaaca gtataaaaaac 300  
 cacaatacag atgtgaagaa atactgtctt cccatccctt cactaaaatg ccaattaact 360  
 acgtcccta aaccatgata tacattttac aataatccgt agaaaacaac agctaccagt 420  
 catgtacttc tgcacagctc acatacatgc acagaagagt gggttcccag tcagaagtga 480  
 gagtgaagac ttagagcatc catg 504

<210> 785  
 <211> 505  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AI112086

<400> 785  
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 agtaagaaaa taaaaagcac gcctttcatt ctgtaaaaca cttacgcgta ctactaatta 180  
 gaggtaatgt ttttttttaa caagccattt tacaagttat tttttttttg aattttcagt 240  
 ctatgcatcc aaaacgagag caaagaacac aactgttatc tttgtaaaaa cactccaagc 300  
 ttgtatggca aagccgtgta acagatggat aggatggatc tgtagccttc tgacctctgc 360  
 tggagtatca gggcaccat ataccatg gaaatcaaaa ccaaaagaga aaaaaaatgg 420  
 gaaggggatt ttaaatgac aagaaagact gaaacaaagc taacccaaaa ctcagcagga 480  
 aagaaaaaaa ctgtgtgtgc tacta 505

<210> 786  
 <211> 523

<213> Rattus norvegicus

<223> Genbank Accession No. AI112107

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ctgatgccca	caccaatagg	atatattcat	gtaacagaat	actactctct	gaagaaaact	180
gactcaagta	acaacacaga	tgcttttcac	agcatgctga	gtgaaatcac	acccaaataa	240
aaaccatact	gactgatttc	gtctaataca	cagcagacag	cagtggctta	gtgacgattg	300
atggatggtc	cctactcaag	ggacctgagg	cgacttggat	gatggaaatg	ttctctattt	360
tagttgtgga	gatgagccaa	caggtgccac	ttcctgccaa	ttccttaagt	gtgggtttccc	420
atgggtggct	tcattagaac	tcatactgt	gcttgaagag	gaaacagggc	cactaagcct	480
gcctcgctcc	tctgcacctg	cacctgcacc	cgcagggctc	aca		523

<211> 348

<213> Rattus norvegicus

<223> Genbank Accession No. AI112161

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atcctggggg	tggggggaat	ctgtctcccc	acccggggt	cctcagatat	aaagttttgg	180
caggttattg	ttattatcta	ggtttgccc	accatgtcca	ctttctgtag	tggctggtat	240
cagtacctac	ttttctcatt	ccagaccagt	tcagcaaaca	tttctgcccc	accccaaatt	300
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<211> 326

<213> Rattus norvegicus

<223> Genbank Accession No. AI112194

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ccagactgag	attcctcctg	gggatttttt	acttctgttc	tgtgccacat	tcctgggtcc	180
tggacatct	gctcgtctcc	agaatgtacc	tgccataaca	tagtggcagg	aagggggaac	240
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<211> 475

<213> Rattus norvegicus

<223> Genbank Accession No. AI112365

282

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aatctagatt ggcttgatct tgaagtgtaa tccaataagg ctgaagacta aacacttcag 180
gtcctggaca agataataaa acactcgcaa gccttctgga tccttggact gggttgacatc 240
aataagggaa ccaatttttg atgttgtaaa agaaatgtgc tcatctccaa tgacaatttc 300
gagttcctgc cggcccactc gatcaggagg gggccacaga gcgtcatctt ctttggatgat 360
ctcaactgtcg tcaataatcc tctttaattc ttccatcaca ctcttatgta cataagcctc 420
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<210> 790

<211> 460

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI112511

<220>

<221> unsure

<222> (1)..(460)

<223> n = a or c or g or t

<400> 790

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attaacatca aaacaatcat ctatttagat atgcttttct gtaaaaaagg aatatattag 180
cagcatttat attttccgca atcacacagc ctacagacat gcagactaac tctgtatcta 240
tttgagtgga tgtagtgtt tgccccgcat ttcgaacacc aaaaccacc tggcagctgg 300
gggttggttt tattttgtta ttataaaata actgaaaaat aaaaaaggca ttaatttcta 360
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<210> 791

<211> 476

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI112571

<400> 791

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taaaataatc attgagatat atgcttctac ctcttaccga catttttagaa actacctctc 300
acacgtagat ccagttgtaa cacttgacag tagcattatg gagcatggta taactttggg 360
acacactgca gatatggata gtgatttccg taaatgacag tccttcacca gatgaagctc 420
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<210> 792

<211> 372

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI112926

<220>  
 <221> unsure  
 <222> (1) .. (372)  
 <223> n = a or c or g or t

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 ttcactctgct taagattcct ctgtgagagc aaaaaagagt gaagagccaa agaatttgac 180  
 ggctagaagt taggaattct ggtggctggt tcatagatca caaagtgtcg ggagaaagac 240  
 actattttcct atcagcaaac tgtgaggtgt tgactcgaca cagacatatg aactcacttc 300  
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 aatangagct aa 372

<210> 793  
 <211> 539  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI112964

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 tcaaccattg acctaggtag gtactgagta ttttttttagg taaatcagcc ataactcctat 180  
 caaatgaaaa actcctcctt cctacctatc tttttatttc ctttgtgcat ttactaaaat 240  
 tgctccatgt ctagacacta aaacaattca cctccacagc aaagcttaca aaattttccag 300  
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 tgcttttagta tccttaatta gtagactgac tttttctgac ttgatttccg atccagttgg 480  
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<210> 794  
 <211> 493  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI112969

<400> 794  
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 tagcaagttt agaccacgag ggcgttgtca ctggtaacaa catttgaaaa ctgtacactt 180  
 gcgaagaaca gcatgttcaa acattagtgt gtctgcatca gtagagcttt tacatgtaac 240  
 aaacatgctc tttccatgta tgacaaattt aaaaaatatg cattgcttgg caacatgaac 300  
 taggcaaaaa tatttctttg ttcactgact ttatacaggg aaacaggaca aaagtcatgc 360  
 atgtacaata cagatgcctg cacagggcat gcaacaaaag gacgcctttt gaaagtccgc 420  
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 ccatgactaa cat 493

<210> 795  
 <211> 461  
 <212> DNA  
 <213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI113008

<400> 795

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tgtaccagac tctggagagg gtctgccctg agcgcggtgt gattgctctt gctgttctag 180
taggcacatc gatgttatag tattgatctt tggaaaaggc gtagtaatca tagccgtcag 240
gttttctaata gttgggcagt gttatcgagg aagtaacgac atttggaac cctctccaca 300
gtgtgctcac cttgtcttca ttgtggagga agcctttgtc ttgataagag gctttgatgg 360
gcaccgagta atggatcctg aaggtgtgtg tctggaaagg tccaacagca cgctcaaagc 420
ggcgctcct gacctgtgtc gctgcccca tacactgagt a 461
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<210> 796

<211> 492

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI113046

<220>

<221> unsure

<222> (1) .. (492)

<223> n = a or c or g or t

<400> 796

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tactttttga cccatcccc atccataaat cccactgaaa ccaatacctt ttggtattct 180
aaaattcctt ccattcctga ttttcatcag tttttattga gtactagatg tgggaagcatg 240
aaaatgtaaa aaaatgatga ctgaattaat gaggggaatgg tgatgggtag atatgaaaaa 300
aatggtttat tgatcaaata tctggaaata caaatacact gtttttcttg ggaagtcctg 360
aggtcagggc tctggcgaaa cacttcttat tctactgcgc ctcaggcatt tccataatct 420
gtgctgcang gagegctgta ttttgcaact gcaaaactcat ctttctcata gtaatcgtag 480
actttcacta cg 492
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<210> 797

<211> 346

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI113055

<400> 797

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aaaaaaataa ttacattac aaaggtagcc ttaggaagga aatactgacc aaaaatttgg 120
taccatcatga ttattcaaac aggaacaaac ctgcaatttc cctggaaaaa ttcccgggtg 180
ggtttttaac tactttcatta caattatgaa aaataaacag gccacctgtt taaaaaata 240
tccattccca attttcaaaa aaaaaaaaaa aggtcaacct tgtaccttca aaactaggta 300
tcaaaacttt aggccagggt atggaggagc aatcccttac ttctac 346
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<210> 798

<211> 424

<212> DNA

<213> Rattus norvegicus

<220>



<223> Genbank Accession No. AI136478

<400> 798

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ccccctagcc gacatgtcgg cggccaagga gaacccgtgc agaaaatttc aggccaacat 120
cttcaacaag agcaagtgtc agaactgctt caagccccgc gagtcgcatc tgctcaacga 180
cgaggacctg acgcaggcaa aacccattta tggcggctgg ctgctcctgg ctccagatgg 240
caccgacttt gacaaccag tacaccggtc acggaaatgg cagcgacgat tcttcatcct 300
ttatgagcat ggcctcttgc gatatgccct ggatgagatg gccagacctg tgccctcagg 360
atccagcaga gacttggggg gaagagaagt gtcaacatac acaactgcac tcagcctcgt 420
gccg 424

```

<210> 799

<211> 380

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI136514

<400> 799

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tgacaaatgg ttagaactgt ttcaccagggt catagacata gatgtggaaa tcatcttcaa 120
acttgatgaa gtacacagtg ggcttggtt caacctgggt tatgacctat ccaactctct 180
tggagccatc atctttgggt tattccacgt gtttacctat cagtccatcc accagctcca 240
ggtcaatgtc taaaggaggg ggctcactgg acctggccat gatacggagg tcacctcttt 300
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agctggcctc gtgccgaatt 380

```

<210> 800

<211> 352

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI136630

<400> 800

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atgaagccca ggctctccag agccaccatg tggactggaa ttcagggttc aagatcataa 120
atgcagactg ccttagacac tcagaacgct caaagtcagg agacgtaaga aatgaaaagg 180
agactgggtc ttattgtaca agaggctgaa ggtatgggtt gtcccccgcc ggctggaact 240
tgtagccggt gagcacgaag aaggccaggg tggaactctc caccaagagc tggtagagcc 300
actgccactg gaagggcact gccactcgaa gcagaatggc gatgatgcgc gt 352

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<210> 801

<211> 282

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI136702

<400> 801

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aactacaagt ctgtctttgt ttacggccct ttgttttcct ttaccaaagt ggggtttccc 120
tttctctctc atcagctttg gccaaaccag aggacttgta aggaaagcag agcctgcaca 180
gtgagagaac actgccttcc cacatcaaac ccatgacag acatacagtg actcagtcac 240

```

ttgagcctgg cctgaagttg ctaaaggctt tgtgaggata ac

282

<210> 802

<211> 435

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI136714

<400> 802

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catgaattta ctgtacaatg acagtgtaca tggctagggt aagtaacgtc accgacttca 180
cagtcagctg taaagagtgg catttcactg gatgcctcga gagacagttc tggtggagta 240
tttgagttta aagactttga aaggaaaagag aatttggctg aaaagtatcc ttttcttttag 300
ttaaatcgaa acaagtctcc agtcagcacc cagtcaaaca cagtgccttg aactttgggt 360
aatttgtcgg acagtatact ccacgccact gtggaactct ggagaacgga aagggtctgg 420
cacagcctcg tgccg 435
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<210> 803

<211> 475

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI137049

<400> 803

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tctagctttc tttataaggt tcaattatct tctttttaca ttaggattat atctaaacag 180
atcatcagca agagagtctt ctttcgcttg ttgtttctgt acctccattt catgtttcaa 240
ccactcttct aattcagtat tctttcgagc atgggtgacct attaaatctg atcctccaat 300
aatgtgtgga agcttttctg ctccaggaca cgtagccttc ttgaatttct tgaaattctt 360
cagttacca cgaccattta gtgggcacag atttctggaa gagttattat ggacaaccag 420
tgacctaaat tcagtcagca gcagttttct tggaagcctc gtgccgaatt cttgg 475
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<210> 804

<211> 446

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI137211

<220>

<221> unsure

<222> (1)..(446)

<223> n = a or c or g or t

<400> 804

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aagaacgtcg tcggcttttc cttcctaagt ctcatatag agtgggatga agatatagga 180
actgtgcctt ggggaggggt cactgtgtga gggctgggtc anaagttgct gggaggggac 240
tctgtgcatt ctgtccaccc agagaaagac agatttgctc acgctcactg caggcgatgc 300
tgggcctgcc gagcaactag cacacataga cataaggctc aagctggcca aggccagtga 360
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gagaatggat actggttcag gagggcagct gaacagcaag agccacagag agagagatta 420  
 ttcctgaggt angaactg tatgca 446

<210> 805  
 <211> 399  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI137345

<400> 805  
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 ttgaggccag cctggtctac cagagtaaga cctctctcca agaggacgac agaagctcgt 180  
 gggctggacc ttgctgttgg gaagcccagg tccccgtagg ctacgtgtcg tcctagtggg 240  
 cagggcagag taggcattct atggttgggc ttagggttca ggtgttaagt gtctgtctgt 300  
 ctgtctgggt aaagggtctt gattcttgtt ctacaccagg gtcttcatgt tctttgtacc 360  
 tgaaacccca cttccactga tatgggagtc agcttctca 399

<210> 806  
 <211> 392  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI137356

<400> 806  
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 cttcagacac acagaagacc ccattacaga tggttgtgag tcaccagggtg gttgctggaa 120  
 accaaaccca aatctttcac agaacagcaa atactcttaa tctctgagcc tcttcatggt 180  
 tcttaaataga acaataaccc ttttgtctac tggcccagag aggctggggc cactgatcta 240  
 acgtggaccc accatattgt gctgcacgag gtagcgaatg gtctcccgga tgccagaact 300  
 gatgagggtg gacgtatagc ccaagaaaat ggtgcagcct gtgagtgggc ggcggctctg 360  
 agtcagggtt tctgtatgat cttcatctac tg 392

<210> 807  
 <211> 540  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI137406

<220>  
 <221> unsure  
 <222> (1) .. (540)  
 <223> n = a or c or g or t

<400> 807  
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 gtcccttccc aagttggaca cacctggata cattaaatgt tttatttttg tgacagacaa 180  
 ttctttttat tttagttaga tgttttgaat gcctacagta aatctgcca ttccgggagg 240  
 tcgcagacct cctggcctcc ccccaagtct atgatctcat tttcacagat aaacacccac 300  
 ttctcagacc agctacccaa agcatgcatg ttctcgagtc ctttgcaaac cggttatttt 360  
 gtctacataa cctcctcata tcccttctc acattcttcg taggcagatg ctggagctgt 420

tgctctaacc tcctgagata tggtagggccg ctgggggagt ctgtttgggt tcatttgacc 480  
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<210> 808  
 <211> 519  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI137420

<220>  
 <221> unsure  
 <222> (1)..(519)  
 <223> n = a or c or g or t

<400> 808  
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 ctggggacag acatggcacc atggccacag tggctggagc tcagctgtcc tcatcatcat 180  
 catcggcaga ctgagaggcc aactgcatcc tctcatggtc ctgatgtca ttcccaggcc 240  
 tggcgggggtc agagctgtcc tgtgggctgt catgcagctc ttctgaggag ccacccctgg 300  
 ggccatcctc caagtcctgc ncgtcttct gtgctccatc ttctgtgttc tctcccttct 360  
 gggatgcggc ttcaccattc acaggtgctg accgatcagt gctgggctca tcctccgcca 420  
 gctctctggg agcctgctcc caggctgttc ctccacttct cgcacgcggc cgttcttctc 480  
 ggctttgatc tccgcctcgg ggtttggggg gtggcttct 519

<210> 809  
 <211> 416  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI137468

<220>  
 <221> unsure  
 <222> (1)..(416)  
 <223> n = a or c or g or t

<400> 809  
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 tttattaact gctttggtga ccctgaaaca tatgaggcaa agctagataa acacatggta 120  
 gcctgggggc cagcacagga acagtgagag gtggaagagt tggggcaaatt ggagaggagc 180  
 ctgagggaga gtcagggaat ancattcctg gctgagggaa tggggaatgg cagatgctgg 240  
 gaatctgcat tctgacatgg gaccaaattg cttcagtggc aagcggggta cccttgggcc 300  
 gcacccagc tgccatcctc acaaggctcnc cagctctgcc acgtccagca gtcgctgtcn 360  
 cctcacggcc tcgggccccg cacagagtgt gtcgttctgc gagaacatct tatgtc 416

<210> 810  
 <211> 432  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI137488

<400> 810  
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 agggtaaaat aacccggaga ctttcttgct gttgagaagg tcctgtctcc ttttcagggt 180  
 gatgaagccc accagacatc acaaacaact gcaacagggt caccggcagg cagcacaggc 240  
 aatgcctcat attcagatct tcacagttgg gcatagtatc ttgtacactc tgggtgaaatg 300  
 gttctcacag caggagcatc acagccagac tggacattct ctcaaagggg tacgagttgc 360  
 agttctgaag gcccttggtc ttggttggtc acaaagttca gtctgttta ctgtgatcct 420  
 tgccctcgtgc cg 432

<210> 811  
 <211> 490  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI137506

<220>  
 <221> unsure  
 <222> (1) .. (490)  
 <223> n = a or c or g or t

<400> 811  
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 ctgccgtgca ggttgggctg gccttcctgt ggccccacc accacaatta cccagcagct 120  
 gggttgacta ctttccctag gaagagcagg ctctgggtgg tcacctccca naggcagaagc 180  
 aggaagggcc tgtaaagtg ggcgtgtggg gctgacgtca tggtcaggga tgggggctgg 240  
 gagagcaggc canaggcagc tgcggcctca gttcccttct cgttcatgtc cagcacggcc 300  
 ttgtgcgata ccctggagac agttttggtg agctgcccc taattcctga taggtcggct 360  
 tccacgtcaa agaggctgct gagggccaacg aggggcagga tctcttccag gttgtagggt 420  
 gcagaaactg aaaaccgtgg caggtgcaaa tccaacagac tccacgtntg agtcatctgc 480  
 aggtgcttca 490

<210> 812  
 <211> 522  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI137572

<220>  
 <221> unsure  
 <222> (1) .. (522)  
 <223> n = a or c or g or t

<400> 812  
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 ggaagactga caagaatagg ggctagggat tctccagaag tctcaggctc atcagctggg 120  
 gtgagttact gtaacctccc ttacaatcct ggttcttcac aacaagtcgg gcagtgggtt 180  
 tccaaaccgg accgcgaagc ttctcatggt tcatcagggt gttccattaa acatgcacgg 240  
 caaaaaggcc gttttctcgg cattaataaac agcaaaaggc agggagtggtg gaggtgtatg 300  
 tgttcttana agtcaagaga ggtgtcacgc cccgagggga ggagaacgtg agtctgtgct 360  
 ctcttttact ttgggttggt gaatcccagc atacattgtt cagccagccg gtgccaccgg 420  
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 cgttgtctct taagacatct cagcttccat ttggatgagt tt 522

<210> 813  
 <211> 415  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI137586

<220>  
 <221> unsure  
 <222> (1)..(415)  
 <223> n = a or c or g or t

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 gagttgagct atgcattcag tccacaatcc tccagaagtc tgtacttggc gaactacatt 180  
 ggccaggcgt ttggcacagg ggtcttcatg tttgatggcc tcatgcattt ctcttctgc 240  
 aattatactg aatattttcg gtagattggg attatttggg ccaagaacaa ttggatgatt 300  
 actttcaatc aggtcacaca ggtaactgaa ggtctggaca gcttcttctt tatcttcatg 360  
 tanggggagc cagcacagcc agtgtggtaa gacctctcc acattcacgc agtca 415

<210> 814  
 <211> 607  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI137761

<400> 814  
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 tattgcaaca gtactttggc ctatggagtt tgataggatt attgcatca gtcttatagt 180  
 attgtagact gtgtgtcttc tatgtctagt aataaaaata ttctctgac ctcatgact 240  
 caccacacac acatattttct accctatggt gagcactgcc cttttagggt gtactaaatg 300  
 agagaaaaag tttttgctcc tgggttttcc aagagtatac agagatagca gtcacttcca 360  
 cagtgaaggta caatattaaa ctttgagttg aaaaataaaa cagtatccta tttatgccct 420  
 ttctctagga gtaaaaagac acacacaatt acaaacataa aatgaatcaa agttctatgt 480  
 tattgacagg agtccaaatg agtataaacc tgctctcttt gtatgctgtt tactgccttt 540  
 aaaaggctgc tgacagagtc aggtagatta aaagctacga atgtattcag cttttatagt 600  
 gaacctt 607

<210> 815  
 <211> 384  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI137856

<220>  
 <221> unsure  
 <222> (1)..(384)  
 <223> n = a or c or g or t

<400> 815  
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ttcactcggc cagacttcgc ttcgtactcc acggccacgg cacagatgtg cacggagttg 120  
 ggggtggacct tggaggatga ggcaatggag tantatcggg cctgcaggcg tggcagcagc 180  
 tcacacaggt ggtcgatggg tggccgcagt gatgggtant cttggaggat ggctaggatg 240  
 tgcctccggg cttccaccac ccagctcagg tacagctcct tgcctcggc tgaggatgac 300  
 gccatcttgt gcagggtgctc ctgctccgag ggctctgagg cgtactgtgc cagttcgtag 360  
 agcacattgg tgcgtggcgg gtta 384

<210> 816  
 <211> 425  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI137988

<400> 816  
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 aaatctctaa ggggccccaa cacaaatgct gaggtcttaa tggaatttac acattgcttt 180  
 gtccctagtt cataaagggtg aactgaacac agcacctgta agtgacagca gttgtaacca 240  
 gaagaagaat ctggactcgg actttttattt ttatatggaa agaataataa ggtgggcca 300  
 atgagcctac tcacaaagaa agaagttacc ttggccttat ccctcacaga cagctaaggg 360  
 aagcaatgtc tcttggtctca caaagtctga taataaaaaga tattaatatg tggcgcctcg 420  
 tgccg 425

<210> 817  
 <211> 401  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI138034

<400> 817  
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 aagacagttt attataaatt tggactccta cagttctggt gtggcgctc gacatttaca 180  
 gtattttotta ccattttatc ttcactccaa acttgctaaa caaagagttc ctctccgcac 240  
 cctcgagggt tcgcttttaag gaaatacttc acgaccacac gaaaccaca cacacagaac 300  
 atttggtttt ttttttttaa aaatatttac agaagtctgt ccagccattt ggattttgtt 360  
 tctttgcca tactgagatc aacaaaaaag ccctcgtgcc g 401

<210> 818  
 <211> 511  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI144585

<400> 818  
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 caaatctgga gataaatatt ggtcagattc tctaaatctg ggtcctcact acgtatagag 120  
 ctagagtctg taaaattcta aatcttgctg gctgtggcac agaaccagta gcttccact 180  
 ttttcccttc tccccagggt acatggggaa agagggcaca aactgacaag acttgatcac 240  
 ctccaaatga caaaattgca aaatcccaa ctcccagcac ctgaaactca ggatattggag 300  
 acctccagc tcagatatat atttttaagt ttctgctttg ccacaactgt ttgtcaccaa 360  
 attctggaag ctattgtctt tacccttatt aaaaacaaaa acaaaaccca tttataatct 420

caattcttcc aaatggtcag aattttgatc tattctgaaa ttcaaattcc ccagttcatt 480  
tttaccctt ctctcaagac ttcctcagag g 511

<210> 819  
<211> 576  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI144586

<220>  
<221> unsure  
<222> (1)..(576)  
<223> n = a or c or g or t

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gcttttctat tggcaattgg gacagactga tggaatagtt tggaatggga tcaaattggaa 180  
agattgcttg ccacctacag acaggcacat gagagattcc ccaagctggg gccaaagggtg 240  
gtcaggccct anagcaaaat aattccattt ccctccagag tgaagggaaga gaaaaagctt 300  
cagatgttaa cagtcaaagt cagagctgag ctctctggat cagaaaggca tttcctaata 360  
gaagcaactt tgtaaggcca gaggtcccaa agagctcacc tgttccacag ctaggaaacc 420  
ttanggttag ctgaactatc ataaggaagc taccaagtgg ggaaaagggtg ccaaattgccg 480  
tgttctggat aagggtgtat gttctgccag tactaactag acaagcaaag tattcattat 540  
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<210> 820  
<211> 374  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI144612

<220>  
<221> unsure  
<222> (1)..(374)  
<223> n = a or c or g or t

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acataaattc aaattttatg tcaaattttc atggttctag ggacgatgtg cagagcctct 180  
ttacagctct ttcctttttc atctaaaagc aagagtaata acaccataat aacattttctt 240  
ctttacagga tgagcaacat ggctcccca ggcagtcatt cgttagcttt ccattattaa 300  
cccagagaatg ggtgtgtcnc taactatgaa gacagctcac aatttcttta agatggagta 360  
gagacatttt actt 374

<210> 821  
<211> 510  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI144741





tctggtga

488

<210> 824

<211> 512

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI144936

<220>

<221> unsure

<222> (1)..(512)

<223> n = a or c or g or t

<400> 824

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acaaagtaga tgtaaaaaaac tgcttaagtg aaaaatgtaa tatcgagtt ccattttata 180
agctgaaaaa tgattttatc aacatttgca taaaatctgc actttatata ctgcatgtta 240
ttaaaaaatt ccaccactaa attatgactt ttgcaaattt aggcttacat ttatactgtt 300
gctggtgtat atgtagtaga tatggaatgg atattttttt gtttaatagg caacatcctt 360
aaacaataga caacaatttg gaaaattaca gacattttga cagctcaaaa attattattc 420
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taanatatag tgctaggaat gctggatggc tc 512
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<210> 825

<211> 563

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI145081

<220>

<221> unsure

<222> (1)..(563)

<223> n = a or c or g or t

<400> 825

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gggaaaactc tctataaaga aagttaagtc caggtgctat aaaaatcctt agcccttcac 180
atcacataaa aggatgtatc tcggccaatt tgttacctcc acgcacataa ttagacatac 240
agcatgcatg gtactcttag ctctatcccc agccctgcag cacaacanag gaaaagcccc 300
cagattaaaa aaaaaaaaaa aaaaaaatcc aaaaactgggc ttaggctctt tgcattttaa 360
caggtaagat gcaagctgct taaaaactat ggcatattga aaatataacc tctcctgtat 420
atgctgatat aattttaaatt ttaaagggtga aaacatacat ttactaacia aacacatccc 480
tatagaaaat gtttatatag tggaatactg cctttcagac tccatttgca tcagtaacia 540
tagtgactga ctctagtcca agg 563
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<210> 826

<211> 443

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI145095

<400> 826  
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 taattgtaca ctcatgtgtc ttagtctgta aagttgtatc ctcagctcac ccataacctt 180  
 cccagaatag aacactctgt catacattaa catagagcct tcaaaaggta tacacaaggc 240  
 tcaactctgc aggccatacc agatgctgtc ccatccacta gacagttaa gagggacaca 300  
 gcaagggcca tgcagacccc atctcaaaca tcccagtact aatactctgt atttgcttct 360  
 tgtgtctgct ttttctgaac atcaccacat ccagttttcc ttcgcaagaa gtctcctctc 420  
 actggccatg catttctgct cca 443

<210> 827  
 <211> 556  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI145385

<400> 827  
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 ctctgccat ctgagactcg atggcaacga atgctgtgta taaacaactc cattgagtaa 180  
 cccagtgttc ctttctgta cagagaagaa ctgaattcac actgttaaaa gccttttctg 240  
 gcacaactga gaagcagggc tcatcttttag gagtaactcc taacagctag taaagcaatg 300  
 tgggacttta cgttacttca catctgttcc atttcagagt gggaattcag gaaggccctc 360  
 ctaccttccc agtcaactgtc ctctccagac ttctcagacc gtacgtgagc cacacaccat 420  
 gaagctactc atgacagtgg cagcagacaa cattctctga actgacaatc atgatggctg 480  
 gatcatccta gactttgttg atgctaaagg atttcttaga gaaaaccctg attcagaatg 540  
 ctgtgagcag ctgtca 556

<210> 828  
 <211> 567  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI145556

<220>  
 <221> unsure  
 <222> (1)..(567)  
 <223> n = a or c or g or t

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 tatagagttc tgcttcttac atgcaaaact ggtaaccaag tcaggtaaag aaatacttat 120  
 agagagagag ttctggatga tatctttccc ctctagttca atgtgctaag actgagacag 180  
 aagcagaatt tgtttctgtc aagggcaggg agggcagggg gggcagggag ggcaaagata 240  
 ggacctcact aggttaacct ggctaacttc aaactcagag atccagcctg ccactggcct 300  
 accaggttct aggagtagag gagagcgcca ccacaccag tctgtttttt gagacaaagt 360  
 ctactatgta agttcagatt ggcttttaac tcaaaaatct tcctatagcc acctccaaag 420  
 taccaggatt aaaggcatgg gccaccatgt tttggatgac cttgagctcc tgatcttcct 480  
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 tcatccttga ntcactgtgt atattaa 567

<210> 829  
 <211> 439

<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI145569

<400> 829  
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 gtacagatgc tgtacattaa aaacataaat acccctctta caccatgtcc acctcgcaca 120  
 aaggactcta cgcactgctc tctgaagcac ataaccacac taaatgtaca aagagccatc 180  
 cgctggcccc acatagccaa ctccaatcag caagacgtcg attagggtcc atattcccag 240  
 accaccaaag ctgaagagct tgccgaggcc ttcacgccac tggcccaggt agaagcgatc 300  
 cgctccaaag cccccaaggg tgatgctcag agccagagcc gtcgaccact tgtagcctcc 360  
 agtccagttg cagtacagca gtttagggaa agtccgggta cccaagcaat gaatgtgggc 420  
 gcgcacagtg cagttggca 439

<210> 830  
<211> 480  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI145870

<400> 830  
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 ctgcagcaat agctcactta acaaaatttt atctgacttt ggggtggagga actttcccaa 180  
 gtaaaaaatca actggagtgct tctgtacaaa gctttcctaa tgtctaactc cattaatgaa 240  
 ttacttgctt ttgcagcttt taagtcttga gctaagcctt cagaatgatt tattgaaaag 300  
 tcttattcag ttcagtttta gagaagaaaa ctacaacttc tcaaagttta gtttaaacacg 360  
 gtctcctctt ggcaagcatt agatatcttt agcttgactg ttcctatttc cccctctgtc 420  
 ccagctcttt tagatcacgt tagttatttt taaggatcca tcttttttga catgtctagc 480

<210> 831  
<211> 421  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI145931

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 gagcttggct ttcaggcagt tgagtgcctg acatgggtgc tgggaactga acttgggtct 180  
 ttggcaagag cagtttaggc tcttgaccac tgagctggct ccgcagcctc ccacactggc 240  
 ctttgaagaa atactgatct aagagagcgt ggttccactc agtagctctt gggctctcagt 300  
 ccaggtctat tcccaggagg cctagtggat cctgcgggtc gtgtagtcca gaaccatgct 360  
 ggccgcacca agcaggggcg ggtcaaccaa gtctgaaacc actacatcca catcctgcac 420  
 g 421

<210> 832  
<211> 394  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI146177

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ggatatcctg aggcactcgt gttgagcctc actcacaccc gcccaagggt ggaagcttag 180  
catggacctg cctccactg gctcgtctcc tcagtgtccc acccttcccc agaccagaga 240  
cttcattaga cagccaaagt tatgaagtga gacagtggac agacatcttg gttcgggtggc 300  
catctcggca tcttgggtct ttggttcctg tactctcaaa ttgctttcca gagatgggaa 360  
gtgcatcctt tgagggaatg tttaaaagta atca 394

<210> 833  
<211> 520  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI146215

<400> 833  
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caaacattat gctatagaga tgccaaatga atgaagtttc tttgcctgcc cctgaggagc 120  
tcacattcta gtaaaggaca ctttaaaaaa taaaatatac agtacaataa gtgattcaat 180  
agaggtaggt tgcaactata atggtgacca aaggaagggc cagggttaatt aatgtcacag 240  
agtctcaaga acgcatggag tttcccagaa gaagcctagg gctctccatg caaatatggt 300  
gtctacgaag gtctggaggg ctacaactct ggacttctgg aaaactcttt aacactctta 360  
tcagagcaga gtggcaaaaca caagaggagg gtcttagata ccaagcagag actctcacca 420  
aaaagctcct aaaactgcct gtagcagggg tgaggctgaa tgcttctaga aagcccaatt 480  
cggtaatctg ggccaacaga gatgggaaaa tatacacagg 520

<210> 834  
<211> 421  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI146216

<400> 834  
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aatcggctac gaaaacttga ataccttttg cataataata ctacggtctc actctctgct 180  
tttgctaacg actgggtccc tctctcgctc taaccctggc cacctcgtca agcctcgact 240  
gccaagtcca cgccgagaat caccaaagga aagaggtgag tgggcatgga aggagggagg 300  
agagagagag agaagggaga ggagaaaagc aggtatcata tacaagcaat ttctacacat 360  
atattacaca ctgggataat gaccgatcat taagatatac ataattcata taaaattttg 420  
a 421

<210> 835  
<211> 456  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI146237

<220>

<221> unsure  
 <222> (1)..(456)  
 <223> n = a or c or g or t

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 ggtgtaaacc accatgccag gctttaactc gaaatctcaa agcctactga gatttagaag 180  
 ctttgccata aacatgtttt tttttttttt tttaaacttt ttttcctttg gaaactacca 240  
 tggnaataaa tgattattgt atatcaacaa aattattctc tttttcagtc aaaaataact 300  
 ttcacaaaat acctggctaa cccaatagaa aaatacaagt tacattctat cctgaggtta 360  
 aaagaaaaaa agtttgatcg gggagggtt agtgaccaca gtgtactctg tcagcgtagt 420  
 acttgctgtg gctaatttca atgaaaagga acttct 456

<210> 836  
 <211> 637  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI168953

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 tgatgtaatg tttcattttac ttgattaatt cttttctcta aaagtaatag ttaaaaattg 180  
 ccaatgggta aattatgaat acaatcgtgt acaaagccaa catagtatgt ttaccattt 240  
 atctctttca agttctgcta ttttaatttc tgaatacaaa ggaaactccc agaaaaataa 300  
 agccaaaaga ggcttaagtt cgacactatt atgtttccaa agtttacctt aaatctacag 360  
 ttaaccagta gatggttgga gaccagagtc attcctttta taggccagag tgactctggg 420  
 ctcttatgaa ctttaaccctg aaaggaggca gatgtaggga cttcagttta gtttggattg 480  
 taagagggga ctctctacct agagaaaactt tgaataattt caagacttag aagcaaacaa 540  
 taaaaattta caatacaatt aggatataat tttttaatat aatagacatt gttaattaac 600  
 tatacacata tggtagatt tcggcagtaa ccaagcg 637

<210> 837  
 <211> 448  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI168967

<400> 837  
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 tttagtttgc agtgaagtca actaaggctc aggaagccaa agtgccttgt ctagctacac 180  
 aaccagtttag atctgggaac aaaatcttcc tactgcactg aacagaaaat ggggccaca 240  
 ctttgggcta acacaggaag agggccgcatc agaaatacta gcagggaat tgtctgactg 300  
 gaggaatgac cttcggatca aaagttcaga tactcaattc ttgaaaatcg ggatcccatg 360  
 caaaactggc aatgcattcc aggaaactag acggtcttca gcatacatgg aaaccagagt 420  
 tgtagctcct agtaaccata taacggag 448

<210> 838  
 <211> 534  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI168975

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ggtcttaaaa tgggatacag agcacagtga cggtcaccat ggtgctgtca cagcacaagg 180  
agctactggg tgctcatttc cttcctgaac attccctgag cctcagtcca cgatgggtcaa 240  
cgctcccac aaacctggag cttttggact ctggctactt cctggagggtg aagtcacaca 300  
ggccacgccc tgccaccccc aatcatggcc agtcaattgt cttcagtagg cctcagtact 360  
gaacactcgt aactgcctga cacagctgac cctaccctac ctagtgcacag ctggaggcat 420  
tgtctccatt cttgcctgtc tgcctgtgac ctgagaaaga aatggggaaa agaaacttcc 480  
actttcccaa gaaagctgga aaaaagagag ggcagattgt ttctgggcag gaac 534

<210> 839  
<211> 255  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI169007

<400> 839  
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tcctggtaga atcaagaaga ttttcagtgt ggagatgatc tcatggagat tggaaatgtt 120  
caacttgcca cgagcaactg gaacggactg tctgtaggaa actacagaag agcgggggtg 180  
gggggtgggg agtactatgt ctaccagcgc tttccgcttc tagctggact attattatac 240  
agggagagaa tgcct 255

<210> 840  
<211> 474  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI169041

<400> 840  
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aataatctag acagaacggc ctttcctcta ggtacatcag tcactttgtg ttttcaaagg 120  
cttgtctttg ctgtccttac ccaacacagc tctctttttg aggcaagctt gagttacaag 180  
gctgatccca tcttctagtg catatgacag ggatggagat cctgggttct ctaccccagc 240  
acctagctgt gatcattctt tctcctctt accaggcctg agggctcctc aatgtatacc 300  
tgccccccaa ttctcacact ctcaggtgct tttcttagta tcagcagccc ctccacctca 360  
ccataaaact ggatcccctt ttcttttagc gcctcctat ggcttcccat tgctttgagg 420  
aacattagat gggctctgcac catcccactt cacagcacat tctgaccact actg 474

<210> 841  
<211> 522  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI169075

<400> 841  
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tctactcttc tagtcccagg atcctctacc caggggaatgg tgccatccgt gatgggtgag 180  
tcttcccact tcaacagaca ttcataaagg cccttttccc tagtgactct aatttttattt 240  
caagttgaca attatcatta gcagagcagg ccatgtctct gcctcccccc tccaaacaca 300  
tgacaggtaa gaggatgaag gcagaatgta ggggctacag tgcaagcagg aggaagatat 360  
atcctactgg cttcatttctg ctagagaaaa ctcttaatat ggggaccttg aagaaatatc 420  
atggactcca cgaatctgct gcttcttgag gaaagagcta aagttcaaat cctctactac 480  
aattcattca tttctgggcc tgcttgatt tgaacaaaaa tg 522

<210> 842

<211> 703

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169156

<400> 842

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aggtacacat atccactggg tccaggcaca gggcatgggg agatgctgca gtgagtaact 180  
cattttttgc ataacagtat tgcttttgtc agtgtgagaa taaacaggaa agccacgttt 240  
cttcataatc tgggtcttggt aatagataac aaaggagaca agaccttggg cccgggtactg 300  
aggcacgggt cctcccattc gcactctctc agtttggtcc attagagtcc aagatgcagg 360  
ggttccctca ggccccaaga cacaggaact tgggaagtcc tttatgcagc gttcgatgaa 420  
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aacatccaaa gatgaaagt taaacatctc ttgattgata gccttgggct tgccacttcc 540  
tggtgataaa ttctttgtat ccagcagggg aaggaacagt ttcctaactg tctctgatac 600  
cacatagagg atgttttctg agtggttgac ttggaaagaa tggatgcttg caagattttg 660  
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<210> 843

<211> 556

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169163

<400> 843

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ctcttggtgt agactgctca ggactgaacc ccaccttgt tgctcatagc ttggcctttg 180  
ccatgctact aagccatttt tggactgttt agtgatgtta attattttta ttactcagga 240  
acaatcagtt ttctccttgg tcattgtcct ggttgattta ttgtgtcaag gtgacacagg 300  
ctagaggtgt ctggaaagaa ggactccaga tgagaaaagc ttccatcaga ttgcctatag 360  
acaagtctta tatagtattt tcttggttaa tgatggatgt tggaagacct ggatcacttg 420  
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<210> 844

<211> 649

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169166





<220>

<223> Genbank Accession No. AI169279

<400> 847

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<210> 848

<211> 634

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169284

<400> 848

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tattagtctc acacacacat atacatgtac acaggaagga aggcaggctt atttacaaga 180
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tttctgagaa atatcaaggg gaaagtcaaa caccagtaaa cactgtctct gaagtgcaaa 600
gctggagtga ctgaaattca gccaatactt cgaa 634
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<210> 849

<211> 567

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169302

<400> 849

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gctatgggca tctgggaggc tcccattggg catcaagtgg cgacacagag cagggtgtgc 420
tgcacgtgct gagagctggg cacacagagt ggccaggcgg cagggtgtgc cgcagggtgc 480
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cctcatgcgg tagaccaggt tgtgcca 567
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<210> 850

<211> 637  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI169317

<400> 850  
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 ccagttctgc attttcattt agcaaagaca ctatagaaaa tgaatcatca tatcctctct 180  
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 gttattgctt tgacctcggt tccctgaggg tgcttagaca gtgaaaattc ttctccccac 360  
 ccaatggatc gtaacttgaa atttttttgg tcaatattaa gtactttcac ttcccggggt 420  
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 gactgcaagt cgtctccttg ggtttccact tccactgttt ggaggggctc cacagtcccg 540  
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<210> 851  
 <211> 644  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI169327

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 caagggatgg ctgaacaggg aaacactgtg cacacccac agccagcact ataggctctt 300  
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 gtgatgtgca aatttccggt ccttaaaccg cccgcgatga gaaactcctc gctgcgggtc 420  
 tgggacttgt ggacatatcc acagaggctc tccatggctg ggggtgtaggc gaaccggaaa 480  
 cctgtggcat ttcccacagc gtogaatcct ttgagcatct tagtcatctt gatctcataa 540  
 cgctggatata aggtgggtctc gatgatttct ggggaaccca tgaatttagc cttataaacc 600  
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<210> 852  
 <211> 625  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI169337

<400> 852  
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 atggcctcga aagagttcct tctcaagggt gtgggtgcatg cttttaatcc cagcacctgg 180  
 gaggcagagg ctgggtgggt tctgtgagtt caaggccaac ctgggtctaca gagagccttc 240  
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 gaagaaagga ggagtgcagg ggaggaggca gagacagtgt acatgtaaaa cctgattcca 360  
 caggactttc ccagcatcat ctgaaactat acatcccttg ccttacagcc ggggggtggg 420  
 ttctttggtc cagtagacct aggactgggg tgtgcaccac tcagtctacc tccatcttct 480

tattctgcaa agaagccaca aagacttgcc actccggttg gtaaaagcgc ttatagacat 540  
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tggccttata gtccatcca tgatt 625

<210> 853  
<211> 491  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI169529

<400> 853  
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tgtggtacat ccctttctca tccctagatc tttatttttc tccgaactgg ttctgttcta 180  
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gtggccacgc agggaccaca cagcctctgc agaggtggat cagtgtgctg gaccctggag 300  
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aaggatagtc cttatgattt tcagttgagg ggaaggtggc caagcggagg ttcttgtcga 420  
ggctgaaaaa ttctccata tctttttcag ttaattcaaa atcaaattcc tgaatattct 480  
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<210> 854  
<211> 453  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI169557

<400> 854  
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gaaaggcaca gatagccata tgcaattaca tgttagaaat cagaattttg acagtgaana 180  
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ttgactagct gcttaaaata tgaaaacaaa gcaaaacgaa accctatatt ttaataagtg 300  
atagtaaaac aggcagacca gccaactaag ggacaaagag aaggcggagg atggaaaaga 360  
ccaccacact cactgcaggc tcgtggctcc ctcaacccca ttcgccttca tcaggctgat 420  
gacctcattt cttccataga acctggccaa gtc 453

<210> 855  
<211> 580  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI169612

<400> 855  
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accaacaaat cccatcaact attgtagagt ttgatgcaaa tttcagtcca gggcctcgtc 180  
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gcacatgtac caggacccca ccatccaggg ttatgatgct cttaactttc ctgtcatctg 360  
gggtgatttc atcgaaattc acgcccagtt tgaaggaaat ctgggtgttt ttaaaagtac 420  
tctctgaccg gatgacgacc aagtccctt ctacgctgat gatcaagttg ggcttggcca 480

taccggccac ttctctgggtg gcgaagccaa ctcccacttt tttcatgtaa tcatcgaaagt 540  
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<210> 856

<211> 583

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169617

<400> 856

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 gctgccggaa gttccaatca agaaggcaag gacagtggca atcaagggtc ctctctatcg 180  
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 gccgtcgtct gagccggatg caaagagtgg gtatcggggg tggaaggcca cagcccgcaa 480  
 ggcttctctg tggtgcctca gcactttgta tggcttgggt gaaagatcca gggcaaacca 540  
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<210> 857

<211> 600

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169619

<400> 857

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 aataaataac ggtgtttaat cattaaagggt aaaaatccca actctttggc atctgacagg 120  
 attctattac ttgtcaaact aatgactgta tagatagagt taatcttagt gaccattcat 180  
 cagtacaata tggtacaaag gtgcagtttg ctttaaagta gaaacagcag aaactttcca 240  
 gccacaaaaa acttggattg atgcagtaag ctgggagccg gcctctctct agctctctct 300  
 tacatgttgc caacatggct gcctctctat taagagctcc tgggggtttct aagagtaatt 360  
 ctgctctaag gaaagggtgc catccattct ggacagagga aaaattatga ttgttccagg 420  
 aatggcccaa ttcgtcaatt aaaaagtatt ctgtttttat aagcaagact gctaaccctt 480  
 tagaaactca cagtgcctcc aaagaaaaca taaaatatgt agtcctatat agccagaatt 540  
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<210> 858

<211> 682

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169620

<400> 858

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 caggcacgcc ccggaatggg caaagacctg gcaggaaggc actcttgac atgcgcatag 180  
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cgccctctca catctcacc ttataattat aattttatag cagaaatgat caccctatcg 360  
 cgtgcaatga ggaaacctca gcgatgtgca agggctgatc aaaggaaatc actgagtctc 420  
 tctcaatccc agtgcaatgg atccacagat ccatgggggtg caggagcaga gaactcagat 480  
 acagagagta tccctctcct cccagtgcga tggaccacac ggtccatggg gtgcaggagc 540  
 agggaaactca aatacagagt aaatcctgaa caagataacc aaattccagg tgaggccctt 600  
 tgttcaaagt gctgcaagt cttgagtgtat aacggccttg tcatgttact gttgagatct 660  
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<210> 859

<211> 547

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169668

<400> 859

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 ccagtcggat gaagcgctcg tcatgagata ccagaaccac accaccctg aagttgttga 480  
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<210> 860

<211> 554

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169690

<400> 860

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 aaagtccgtt aaaagagcaa atcaccttgg aaatgttctt tacatgtctc caacctatga 180  
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 caaacaataa gttgtccatt caaacaaca aatttttaata actttgattc aagtaactta 480  
 gaaacatggt tcacgtgggg tttaatgtcc atttatggct aaatatcatt ttaagagaga 540  
 ccaaaaattaa taac 554

<210> 861

<211> 652

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169695

<400> 861

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ttctccaggg cgatcttact ccagaaaaaa taagcagaaa caagaacatc tctgggaatt 600
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<210> 862

<211> 490

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169706

<400> 862

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cttaggcctg 490
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<210> 863

<211> 492

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169751

<400> 863

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gcaaaagcag ca 492
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<210> 864

<211> 494

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI169779

<400> 864





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<210> 868

<211> 594

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI170260

<400> 868

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<210> 869

<211> 635

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI170313

<400> 869

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<211> 542

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI170327

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catttcctttg caaaacaaat ggagcagcac tgctcttgat caggtgcaag tgctgatcag 420  
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tacaattgtc actagtaaaag tcgcttatat gtaccacagt gtaaaaacaa aaaacaaaaa 420  
acaaacaaac aaacaaaaaa ccccaaaaac ccaacaatac tgaaacaaat gaaaatcttg 480  
aaaatcgctt gatgaaaaat aaaataacca gtggctttga acggttcccc ctggccatcg 540  
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<220>  
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tcaacccctt tggctgggca gttggtaggg cagagttcaa attcagtcac tcatttctct 360  
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<212> DNA  
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<213> Rattus norvegicus

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acacagagaa catgggagtg aaacaatcct atttacacag atgtagagac agtagagcaa 180  
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<210> 876  
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<223> Genbank Accession No. AI170673

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<210> 877

<211> 671

<212> DNA

<213> Rattus norvegicus

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<221> unsure

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<223> n = a or c or g or t

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<210> 878

<211> 450

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI170696

<400> 878

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tcatgaggtg cttggtctcc taccaccagc atcacggggc acttgagggt catctcacca 180
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 ttaatacaat gtatatgaaa taatctaaaa tttacaagac aggaaacata tgattatttt 180  
 tttttctcct aaagttgaaa agcttggaat gtatgtccaa cagtgaggta aaacattttg 240  
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 tcaaatttga cacaataact gaatgactgt agccaaagag acagggtcag aaaatgccaa 360  
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 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI170752

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 cagaatctag ttaaagagag ccaattcctg tagctttggg gttttacaca cagggcaca 180

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gacttcaaca atcacatgaa gctaaactgac actgattaca gtgaaagcct gacagtaaag 240
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aatgtaaaact a 671

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<210> 884  
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 <213> Rattus norvegicus

Figure 1 consists of 12 histograms arranged in a single column. Each histogram represents the distribution of the number of non-zero elements in the vector  $x$  for a specific value of  $n$ . The x-axis for all histograms is labeled 'x' and ranges from 0 to 120. The y-axis is labeled 'count' and ranges from 0 to 100. The histograms are for  $n = 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120$ . As  $n$  increases, the distribution of non-zero elements becomes wider and more spread out, with the peak count decreasing and the range of non-zero elements increasing.

Figure 1 consists of 12 histograms arranged in a 6x2 grid, showing the distribution of the number of non-zero elements in the rows of the matrix  $A_k$  for  $k$  from 0 to 11. The x-axis for all plots is 'Number of non-zero elements' ranging from 0 to 100. The y-axis is 'Frequency' ranging from 0 to 10. The distributions are roughly bell-shaped and centered around 50-60 non-zero elements.

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1. General Information	
Name	Address
Mr. John Doe	123 Main St, New York, NY 10001
Mr. Jane Smith	456 Elm St, New York, NY 10002
Mr. Robert Brown	789 Oak St, New York, NY 10003
Mr. Mary White	101 Pine St, New York, NY 10004
Mr. David Green	202 Cedar St, New York, NY 10005
Mr. Susan Black	303 Birch St, New York, NY 10006
Mr. Thomas Gray	404 Spruce St, New York, NY 10007
Mr. Patricia Hall	505 Willow St, New York, NY 10008
Mr. Christopher King	606 Ash St, New York, NY 10009
Mr. Rebecca Lee	707 Hickory St, New York, NY 10010
Mr. Daniel Scott	808 Sycamore St, New York, NY 10011
Mr. Elizabeth Young	909 Magnolia St, New York, NY 10012
Mr. James Wright	1010 Dogwood St, New York, NY 10013
Mr. Margaret Hill	1111 Redwood St, New York, NY 10014
Mr. Benjamin King	1212 Cypress St, New York, NY 10015
Mr. Victoria Lopez	1313 Juniper St, New York, NY 10016
Mr. Andrew Davis	1414 Fir St, New York, NY 10017
Mr. Sophia Miller	1515 Palm St, New York, NY 10018
Mr. Nicholas Wilson	1616 Cedar St, New York, NY 10019
Mr. Isabella Moore	1717 Birch St, New York, NY 10020
Mr. Alexander Taylor	1818 Spruce St, New York, NY 10021
Mr. Charlotte Baker	1919 Willow St, New York, NY 10022
Mr. William Evans	2020 Ash St, New York, NY 10023
Mr. Olivia Garcia	2121 Hickory St, New York, NY 10024
Mr. Benjamin Harris	2222 Sycamore St, New York, NY 10025
Mr. Emily Clark	2323 Magnolia St, New York, NY 10026
Mr. Jacob Lewis	2424 Dogwood St, New York, NY 10027
Mr. Hannah Walker	2525 Redwood St, New York, NY 10028
Mr. Samuel King	2626 Cypress St, New York, NY 10029
Mr. Grace Hall	2727 Juniper St, New York, NY 10030
Mr. Benjamin Lee	2828 Fir St, New York, NY 10031
Mr. Victoria Scott	2929 Palm St, New York, NY 10032
Mr. Alexander Young	3030 Cedar St, New York, NY 10033
Mr. Isabella Wright	3131 Birch St, New York, NY 10034
Mr. Nicholas Hill	3232 Spruce St, New York, NY 10035
Mr. Sophia King	3333 Willow St, New York, NY 10036
Mr. Benjamin Moore	3434 Ash St, New York, NY 10037
Mr. Victoria Taylor	3535 Hickory St, New York, NY 10038
Mr. Alexander Baker	3636 Sycamore St, New York, NY 10039
Mr. Isabella Clark	3737 Magnolia St, New York, NY 10040
Mr. Nicholas Lewis	3838 Dogwood St, New York, NY 10041
Mr. Sophia Walker	3939 Redwood St, New York, NY 10042
Mr. Benjamin King	4040 Cypress St, New York, NY 10043
Mr. Victoria Hall	4141 Juniper St, New York, NY 10044
Mr. Alexander Lee	4242 Fir St, New York, NY 10045
Mr. Isabella Scott	4343 Palm St, New York, NY 10046
Mr. Nicholas Young	4444 Cedar St, New York, NY 10047
Mr. Sophia Wright	4545 Birch St, New York, NY 10048
Mr. Benjamin Hill	4646 Spruce St, New York, NY 10049
Mr. Victoria King	4747 Willow St, New York, NY 10050
Mr. Alexander Moore	4848 Ash St, New York, NY 10051
Mr. Isabella Taylor	4949 Hickory St, New York, NY 10052
Mr. Nicholas Baker	5050 Sycamore St, New York, NY 10053
Mr. Sophia Clark	5151 Magnolia St, New York, NY 10054
Mr. Benjamin Lewis	5252 Dogwood St, New York, NY 10055
Mr. Victoria Walker	5353 Redwood St, New York, NY 10056
Mr. Alexander King	5454 Cypress St, New York, NY 10057
Mr. Isabella Hall	5555 Juniper St, New York, NY 10058
Mr. Nicholas Lee	5656 Fir St, New York, NY 10059
Mr. Sophia Scott	5757 Palm St, New York, NY 10060
Mr. Benjamin Young	5858 Cedar St, New York, NY 10061
Mr. Victoria Wright	5959 Birch St, New York, NY 10062
Mr. Alexander Hill	6060 Spruce St, New York, NY 10063
Mr. Isabella King	6161 Willow St, New York, NY 10064
Mr. Nicholas Moore	6262 Ash St, New York, NY 10065
Mr. Sophia Taylor	6363 Hickory St, New York, NY 10066
Mr. Benjamin Baker	6464 Sycamore St, New York, NY 10067
Mr. Victoria Clark	6565 Magnolia St, New York, NY 10068
Mr. Alexander Lewis	6666 Dogwood St, New York, NY 10069
Mr. Isabella Walker	6767 Redwood St, New York, NY 10070
Mr. Nicholas King	6868 Cypress St, New York, NY 10071
Mr. Sophia Hall	6969 Juniper St, New York, NY 10072
Mr. Benjamin Lee	7070 Fir St, New York, NY 10073
Mr. Victoria Scott	7171 Palm St, New York, NY 10074
Mr. Alexander Young	7272 Cedar St, New York, NY 10075
Mr. Isabella Wright	7373 Birch St, New York, NY 10076
Mr. Nicholas Hill	7474 Spruce St, New York, NY 10077
Mr. Sophia King	7575 Willow St, New York, NY 10078
Mr. Benjamin Moore	7676 Ash St, New York, NY 10079
Mr. Victoria Taylor	7777 Hickory St, New York, NY 10080
Mr. Alexander Baker	7878 Sycamore St, New York, NY 10081
Mr. Isabella Clark	7979 Magnolia St, New York, NY 10082
Mr. Nicholas Lewis	8080 Dogwood St, New York, NY 10083
Mr. Sophia Walker	8181 Redwood St, New York, NY 10084
Mr. Benjamin King	8282 Cypress St, New York, NY 10085
Mr. Victoria Hall	8383 Juniper St, New York, NY 10086
Mr. Alexander Lee	8484 Fir St, New York, NY 10087
Mr. Isabella Scott	8585 Palm St, New York, NY 10088
Mr. Nicholas Young	8686 Cedar St, New York, NY 10089
Mr. Sophia Wright	8787 Birch St, New York, NY 10090
Mr. Benjamin Hill	8888 Spruce St, New York, NY 10091
Mr. Victoria King	8989 Willow St, New York, NY 10092
Mr. Alexander Moore	9090 Ash St, New York, NY 10093
Mr. Isabella Taylor	9191 Hickory St, New York, NY 10094
Mr. Nicholas Baker	9292 Sycamore St, New York, NY 10095
Mr. Sophia Clark	9393 Magnolia St, New York, NY 10096
Mr. Benjamin Lewis	9494 Dogwood St, New York, NY 10097
Mr. Victoria Walker	9595 Redwood St, New York, NY 10098
Mr. Alexander King	9696 Cypress St, New York, NY 10099
Mr. Isabella Hall	9797 Juniper St, New

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 ccgggtccagg gaaaggctgg aaaacttctg ttccccaatc atgtagtagc tactcttaag 240  
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 agtgcgatag gccgggaggt cagggcaggc agcatccagg cacagtgtgc tgagcaggca 360  
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<210> 912

<211> 573

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI171745

<400> 912

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 aagactacac ttggtatttt cccttggttc tgttattctt gaaacttgta aagattcaaa 180  
 atactgtaga gcttggtgaa cagcaacata aatgagacaa tgtactcaga ggtagtctc 240





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tgacagtgtt tacatgtaca aaaacccggc agaagcatcg agtgacttca gtatagacgt 120
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agcaggactc gatctcactt cgtagtgac ttccgtcaca agaaggggtct cttgtgtaaa 240
gcaagccaac ttgtatttgt aactagtgc taaaacacat gtctgctcac cctttcttct 300
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ggaaccaacc caacagggtc accagaaaga aaggtgacga aatttctctg gacaaaatgc 600
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<210> 916

<211> 589

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI171990

<400> 916

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acacagagta gacattacac atgaagaatc aggagggtag actgctggaa ttaggctgag 180
gtcagttttc tctgccactg acattgagaa ggccggagatg aagctctgag aagatgcagc 240
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tcacagtcag cactccaaac agtgggttct gctccctctg gggcaccag accctcagct 480
ccattgtccc cacaggagct cgctgggaca cccagaccgg agtcattgct gaagcaaagc 540
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<210> 917

<211> 647

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI172041

<400> 917

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taataagtta tattcatatc tgagattggt taagctttct catggagaaa aagaaaccag 180
gcagcagcta gagctgcaac ccaagttttc ttctgctcat ccttaggcat ttgtactgtg 240
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gagaacttga aaaatctcac actgaatatt atctttagt ttcttctcgt gataacccct 600
tgtttcaagt cgtttgtaca atataccatt gtctgtcctt aacacga 647

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<210> 918

<211> 647

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI172056

<400> 918

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acggaatgaa ggtgttcacc ccagacagaa tgtacatgga cgatgcttga agactgcatg 180
ttttttccct gagagacgtg taagacaaac agaatttgct gagagccatc tttccaaaca 240
ggaagcataa caagccaaca tgtaaaggaa ggagaagcca aggttaattc aataagacag 300
gtgagacacc tagaaagacc aatacaaaaa ttccaaacaa agcttggcag tcattagtag 360
aaaagaaata catatttggt ttattgacac caggcttaaa cttgtgttaa acaagtaaag 420
cctgtgaata gcaccgtggt aaagattagt ctgctttccc aaagcatttt acaatttagt 480
aagtcaacag gggatcaaat gtcttacatc tacctgtgat ccttaaatac agaaacagat 540
tggataatta accctgcata gttataactc ggatttggtc tactacaacc agtccacaca 600
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<210> 919

<211> 660

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI172057

<400> 919

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tgccaaacga cgactgtggt tagtaatggg aaaaacactg aatctgagcc ggtccatctg 300
aattcttgct tttgtccttg gatggatgat ctgagaggac agccttggtt aagtctttca 360
gtttaaattg acagagctgc ttttatgggt gtgtacagtc tttttctaac aacgcaaact 420
tggcaaccaa ttcgacctgc atataccata taactcctgt gccctgtgtc atctcagtcc 480
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<210> 920

<211> 630

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI172075

<400> 920

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cacatcttgt gctggacctg gcataggaca cctccctcca ccagggccat aaaggccaag 180
gccaggagtg agcaagtgcc ctggtgaaga ggggtaagtg ccaggctccc tcctagccct 240
gcagaacaga tcagggaag accttgccct tcacagccac tgggacacaa cactgaccaa 300
gggttgctcc tggatggcag agtggacagg agtaaaactg caagacagca ggtcctcctg 360
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agcctttgct ttgtttgctg gagtggggat tctgcaaagg acagctcact ctgaacacaa 480
agtagccata ggacactttc ctatattcag tgtggcaagg gacaactgga gggtgctact 540
gactoctgtt aaggcacttg taacagaaca taggtgcaca ggcagcagaa ggttaatcat 600
cacgggagat cagtggcagt ggtgctggct 630

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<210> 921  
 <211> 585  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI172107

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 aaaaaagtcg gctgcagcca gggtctctag tgtcagccat ttttcaaaga ttgtagttgg 180  
 ggttcttttcg aagaatgaca aagccttcca gaattggggg gacagggaga aactcctcag 240  
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 ccgtgatcgt tttgggcttc ccagcctggc ccaccacatc cactgcctga cccacgcgga 360  
 cagaaactgg caatggctgc aactcctcat caaatgtaac cagcatccga ggctgcatgg 420  
 cggccaccag cccatacagt acatagttag atttccttag aatgatgttt cgcacatcca 480  
 ggaaagaaac aagcacggtg agcagccccg ccacagccac ttgactcatg agctgccggg 540  
 cactgtggta ggggcagagg gtaagtgtgc ctttccttaa atgtg 585

<210> 922  
 <211> 696  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI172189

<400> 922  
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 acagattatc aaatataata gagaatgcaa tttagtgtt tttgtcacia tatcaaaaat 180  
 aagcaatttt ctcaaagtta tcaaaagtgc cccactcaaa atctttttct taatcaagta 240  
 aaactacctg ctattgtgca tgtgtgttaa aaattaaaac ggaaaccatc agtgctatta 300  
 cacagagaaa cctgtcttg aaaaacaaaa caaaacaaaa aaaaaaaagg aaaaagggga 360  
 aaaaaggaaa actttatata ttggatgtca ttttaagtgt taaccaagca aacatgccta 420  
 acacagacag ctacattct tggatgaaa gtcacaccac agaatatgaa tgttataaca 480  
 cgacttgat gtaccaaata aagcaaataa aacctatcat ttagtatgtc tgcttgtttg 540  
 cttttggtca actagtcggc agacttaacg ttgtactgct tcaactcagt agtctacctc 600  
 gtgagggttag gttctgtggt tcacgtcaat tgtgggacga cagtccatcat gagagctgag 660  
 cgtttttgca ggaaaacagc tttcatttcc aataca 696

<210> 923  
 <211> 607  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI172274

<400> 923  
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 gaatccggct ccggacacta agtcagataa acctggctgg atttattctg tgagaggaaa 180  
 tgaaggcgac cttcactgtt ccattccacag tgatcagagc caatgacaca gacccaaaat 240  
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tgtgtgctta aaggtagctg ggttacttgc ccacaaattht gggaggtcgt ttctccctga 480  
aggctgccat cccttcacgc cggtcctggg ttgggatgtt ctgggcatag cacatatgtt 540  
caatggccat ccctgatgcg atgtccacct ccattcctct gtcgatggca actttgcccc 600  
tcgtgcc 607

<210> 924  
<211> 668  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI172281

<400> 924  
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tggagcaaac aactgcaatt aagaaaaaaa gtcttgatat acaagggaac ctatgtgttt 180  
tgggttaaga cacatgcaag tattaacaa tattctaaat acaatatgag aggaacagtt 240  
aaagaccctg aaatcatgat ctgtctctca gaaataggat gtttaacagt tctgtgttca 300  
caaatggcat ggattcttta tttctaaaga atgttataga aagaattata gcaccatcat 360  
taaaagtaat aatttttagcc ctgcctatct ccagtcttgg aatatcaaca gaagcatagt 420  
acctttcaac acctaaaaag aataaacaaa aacaggaaat ccattcccaac ttgtagagat 480  
gaggtagctc atgctaaaaa ctggttgggtc atattttctt atgaatgttc taattttatt 540  
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tgggcaac 668

<210> 925  
<211> 634  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI172285

<400> 925  
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gttaattccg gcaagagtct tgccaatctg tttgaaagtc acccctgacc tcatttcagt 180  
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agagaccggg gaggccgagg atgccggctg tggccccga cagcgctgac actgagggtc 420  
ggcagtaatc caggaccgcg gcgttgctc gcacggctgc ctgctgatg aacggcgggc 480  
cttcccgttt ggccaccacc gcggccatcg catccgcccgg ggctccgctt ctgccttctc 540  
gcggactcac gcggaactgg aatgtagcgg cagcagtcct ctggtgttcc gtcagacagg 600  
aaaaagcggg gagtccagcg ccgcccctcg tgcc 634

<210> 926  
<211> 730  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI172302

<400> 926  
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agaccaaagg gttcccatat atcttcatcc agcccacccc agagatatga ttacaaactg 120
gaaggtaact aagaccaga cagtatgagt cctgggtgac ctgctaaagt gctttctctc 180
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<210> 927

<211> 624

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI172328

<400> 927

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ctttatttcc aaagtgttag gcttacaggc aggaatcgcc atgccttatt taggagaaaa 240
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tgccaaatgt cctgttctct ttctccaatc aggaagagaa aattcttttc caaatcactt 480
gaagcttgga caaccccccc ccccccaac attctgtagc atcccaggca gacttcagcc 540
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624

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<210> 928

<211> 567

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI172405

<400> 928

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567

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<210> 929

<211> 651

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI172417

<400> 929

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<210> 930

<211> 534

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI172471

<400> 930

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gaggctacct gaggggaagg aagcacaaaa ggaacccgct gcagactcag ggcaaaggga 180
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<210> 931

<211> 606

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI172491

<400> 931

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cagcct 606
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<210> 932

<211> 649  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI175033

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 atgttttcaat aaatataatc caaaatttgt aaactaagta accagataga tgagtcattt 180  
 tttctagtaa aaccatataa aatattttatt tcatgtgagg tagaggacag ttttgtgtgt 240  
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<210> 933  
 <211> 437  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI175294

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 ctttacaaga gactttgaca ttgtagtgtt agttcatcgc tgcccactga acgatccccg 180  
 tgtgcatcgt ctttgtcttt ggtgtcactg gtaccaataa acacagttca cggcttttaa 240  
 acctaatac actaactagg aaaaagtaaa tcaacgtcac ctttttcaaa attaaataca 300  
 aggactaatt tttgtctcat ggtccacaat acctggaaca tcatgccaaa atattaaggg 360  
 ttaaagggaa cattattctt ctctaattgc accaaaatgt ggctactgta tgctgggtgtg 420  
 atgacaacca gtgggca 437

<210> 934  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI175338

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 ttgtttttga ggcagggtct ccaggaaacc aggctggcct caaacttgct gtatttgagg 180  
 atgaccttag actcctgac ctcctgcttt ttcttccaag cttggggggg taagagccat 240  
 gtactgtgtt ggacctagta gtgttagtaa caggccataa gtctccgttc actagccttt 300  
 gggcgtctcc aactgctgtc atagctggct ggtcactctg gcctgtgagt cccagggtgc 360  
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 caggtcttca gttctgcca attacatgga 450

<210> 935  
 <211> 512



<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI175423

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caggctataa ttattgaaaa tagagtgcag tgaaatgagt taaatataat ttaggcacac 180  
attgattatg aaaataggta tctctcaata caatacttct ctgtcttggt aaaaataata 240  
acacaaagaa aataattcat tttcaaaatt gctttccttt cctgtaaaag gggcgctctc 300  
ctccccgtgt aagcccttta ctgtgaagga aagctttgca tatgtagata taagaataag 360  
ctacagagta atgaagacaa gccactctcc tgaaggagac aaggctcatct gtaaggattc 420  
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gctcttgga aacacataag gacactggga ca 512

<210> 936  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI175475

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caagaactcc ccatttacca aggagaggct gtttcctgct agcactgtct ctgctgtacg 180  
ctccagccaa acagccatga tttcccaga atcccttga gctgttattg cctcagatat 240  
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gtgacgttct gcctttcacc tgtcttagct atcatttcaa ttaaaaaggg aaactaaaaa 540  
atggtagaag aggacgagga gatggtgaaa aacaaccctg ttcagacaaa gataaaaata 600  
caaaatcaga tgtagcacia tataatagaa actggctgaa aacagtacac gctaacagac 660  
atgat 665

<210> 937  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI175486

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acgttggttct gctgtgcttt gtctaaatga acttttatga gccggctgcc atccagtttc 180  
acacggatcc tcttgccac aatttcactt gggaagacca aatcctcaag gatggcgctc 240  
tgactgctg tcagggtgcg gcttctgggg cgcttttgct tatttttctg acggcttttt 300  
cggggttggt tgggcagaat cctcctctga gcaatgaaga ctactgttt cccactgaac 360  
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gtgatgttga gttcccgag ctgcgccttc agatccgagt tcatctccag ctcgagcagc 540  
gcctgagaga tgccagactc gaactcgtcc ggcttctcgc cattgggctt cacaatcttg 600

gcgctcgagc tgaacatggc ttcgtcctta cggagcctcg tgcc

644

<210> 938

<211> 597

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI175508

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atcacaagcc ctggctggca cctccaacc caacacacct tgtccctttc accctcacag 180  
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tcccagtggg cagtgggata gaaaagccag cccaatccac agcaaggagg cagtgtgggc 300  
tggcaaggag ccaaattcctg gtcaggaaaa acaaatgat gtaaaaaatat gtgaatattt 360  
tctatcatag aatgaaaaac tgatctgcat ctaaaagtgc aagaggcgag gtgactgagc 420  
ccttcaccag acgccgcgga agtgcacagg ccgtggttta acttgttgaa ggaggctagg 480  
gtgtgtttac gctgacatag aaaattataa attacactga attagtatcc ataataccta 540  
tatacacaca aaccagttct aaaatccact ggtttacaag tgaaaacctt acaaggt 597

<210> 939

<211> 620

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI175513

<400> 939

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cccatttaaa aaggcaacac atagcatata aaaacctata ctaaaacaaat aagctataat 180  
atggatacat gattgatgtg tctaaaatga tatatataca gtacataatt gtttaattatg 240  
tgatcagtac attgtttctac atgattcctt catgcttcac tttcccaga aactgaattc 300  
tgaacttcct cttctaaaat tggtaacaatc aggttatcct tcgacatcaa attatatttc 360  
atcacaatt tggtaaaccg gtgacataaa aatgtttcat ttccatattc atcaaatatc 420  
tgccggtgat gaaaataggc atgtgagaat attctgtaaa tcctacggca cactgatcct 480  
agttttgcta cagatgatcc ttttatgcta accctgctgg gaaaatattt attgctattc 540  
agaagacatg cagcaccatc cagtgtgtgt cttgtataat ctatggcagg acactctttt 600  
ggagttttat gagctgcaca 620

<210> 940

<211> 563

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI175566

<400> 940

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ggtactgcct gccttgatg acagggtggct gtcacatctg ctagtgtccg tcgtgtgggt 180  
cctgtggcca gggtcatttg gtttatttct ctacattttg ggagtgcctc agaacaactt 240  
aaagaggagg aaggatccg cccaacatag ctggtggtaa gatggactag aaacgctgga 300  
accggaggct gaggcagtca ggcggtcaga tggacagtcc gaaggcactg acgatgcagt 360

acatggtctt gttctcccat cggactgtgc agctcccgtc cgtggagctg tcccagaagc 420  
 aggaacttgc ggtgtgtaac ccagcaccat tcttctgcat gatcacacag gtcacaatgt 480  
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<210> 941  
 <211> 605  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI175590

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 atttttaagc aagttttacat ttcttttggc tatggttctg aacaattcat ctcatgatat 180  
 cttatcacaa tgtgcaaatg catttcacag cacctgtgac aatcatcaag ttaactctta 240  
 agcgtatcca ctgtcagtat ctctcagag gaaaccgatc tgccttctat gaaaagctcc 300  
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 gttagtgtga aataagtcca cataagaatt taatatctaa aagggtgaaat gtccttgta 420  
 ttaatgttag caagatcttt actttttcat cactaagaaa cactttaata gtttttagagc 480  
 aaaagctggt aaagagtcta gggagctaaa accgtacccc tgagggtcaag cttacagata 540  
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<210> 942  
 <211> 446  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI175635

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 aaaagaatga cttatggctt aaaatagatt tttttttaac ctgacaagaa aaatgcagca 180  
 gacataaaat ctgagaggag aaaatgaggt acatgtagcc aggtgttctc agtgctttta 240  
 tacttcattt tcaaaaagtaa acacagtact aatcatcaat tcaattccag tgaataacaa 300  
 cctaaaactg tattaattaa tcggtgttga agtccaaaac caaatgacct ttcaacagta 360  
 ttaccaagta ggtaagtcca cgctagaagc taattacaat gtgaattctg accaaactaa 420  
 agtggttctg ttacatgatg gcacta 446

<210> 943  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI175675

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 cgggtggttc agtgatagtc cagatgggaa gtcttcacat aagtgaggcc cacacggccc 180  
 caggaacgac taggtgttct gacacccagt gcacacagca aggaaatgca tcaattttat 240  
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cccttatccc tcctcatgcc cacagtcagc ccaacactgc ctccgttcct tggggccagca 360  
caggcaggtg ccacctttgc tgcaatgggc acctggagta gctcagacgc ttgaccactc 420  
cagcccagac aagagttggg tccagcccct ctgggagttc atct 464

<210> 944  
<211> 506  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI175790

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aattttaaatt cagttcatat ttacagatta aacatgaaat atctatgggc gccaaagcata 180  
ttgcacatca cagagagaga gagaaacatt tgtgcatctc agtaagtttg cccagagtggt 240  
ccaactctag acttttttatt ttgtagaaac acattttactt tttgtgcgtg taataaataa 300  
aaacgcagct tgtgggatgc tacttaacac taaaacaaaa tatcctgaaa aatattattt 360  
gtttccctct cagagagaga gaagcagtg aacagtttca cagggtacttg atatctgttg 420  
gttattcgca tccaaattca agggggacct taacctgagc cccactgagt cacagccaca 480  
aggcccacac ccattattgg ctccaa 506

<210> 945  
<211> 573  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI175812

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gcctgcaagt gtgtggggccc acataaagaa ggaacttatt tatgacatta aatgcacaag 180  
aaaaatatgg gatagttaac agttcgtttg gctgaggaaa aatgtcattt cttgcatcct 240  
gctgcttgct agtggaattg gaccaaaggc ggtagttaag gaaggaataa atactaaaga 300  
atattgctaaa caaatggcca gcacagagtt ttcattttgtt ccttggaagg cccaagctga 360  
aacgcaaagt catctatgat cacaagcaca gtaaaacttca ggagaggtct gcaggagcaa 420  
gaaaatcaag cttgaaactt ctgatttgcc aacgaagaga aagaacatga cgttttcagg 480  
gagaaccaac ctcaacaagt cgaatcgtgg ctgtagggga gaggtaggggt ttgcagctag 540  
agacttttaa gaacagtgtg tgattaacca tgc 573

<210> 946  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI175833

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cacgtttgtc ctgggtgggt ccagggaggg cctgcccagg gatggtggca ccaagaacca 180  
gggcagaggg atcagcagca caccacaggg ctcccttggg tgggtcacca ggatggggat 240  
ggcagacaag gcaaggacgg ggagaccaca tgctcatgca gacagggagt taagagttag 300  
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tgatggatga cctgcccattg ga

382

<210> 947

<211> 523

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI175871

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tggctccatt aataccagga ggtccaacaa acgcttcact gtgagattcg tctcgcgggc 180
tgtctccatt tcaactcttta ctgcaattga gtgactcact gtgctgtctc tgtgccgctt 240
ttctcttgac ctacaaacat ctgagccagg tttcaataaa cttagaacga agcctgcttt 300
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ttgaatcctg ctttgtgata ggacaatctg ttttcaactc acaagaatct gtgtaggagc 420
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<210> 948

<211> 621

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI175997

<400> 948

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ttaatttttta atgtattgca gataaaactg taaagaaaca agaaagaaca ttatagagaa 240
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ggtgcatgtg tggttgctca aatgtgtggg cacatgaaca tttgtgtttg catgcatctt 600
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<210> 949

<211> 574

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176002

<400> 949

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ggccagaagg cattgggagg aagaaggag tctctggtct aaccctcagc acggccaggg 180
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ccacttccac cagggccagg tccaccttct cttggaggaa gacatggaaa gccatgagtg 420
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tgaggaagcg gaagtaagag ggcattgaaa tgtggctgtc atccttgaat tcctccagct 480  
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<210> 950  
<211> 549  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI176031

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gccaaaaatg gggatccccg tttcccttca ccccatgttt cctggatcct ttcctttctc 240  
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<210> 951  
<211> 450  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI176061

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gccctggaga aggcaactg cccagggaag aagtagatgc gggagtcctc gccggcctgt 180  
gctatcttac tgactggga ttcctgagggc tcctgagggc cttgcttcag tattgggcag 240  
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<210> 952  
<211> 382  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI176130

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caggagcaaa tcagagtggg ccttggccca aggttacatt cacagctcaa ggtaagtgca 180  
aaagaatgga atgtgaggac agtgcgtagg ggtgctccc ttttgagcgc aggcctcaga 240  
gaggacccag agccatggct accctctctt cagtgcaccc tgctgacccc agggagccct 300  
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<210> 953  
<211> 518  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI176229

<400> 953  
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gtactgtacc aagtaggact ttgacaaatt acaaaagata tattcacaag agacatgcaa 180  
cagaagttca gttaatttag gtcataccac agtgctgact tttgtactgg caccacaacca 240  
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gactcctgta accattccaa ccatcaatca atcaatggga gctgccacag aaactactgg 360  
ccaagaacaa caggcaagcc aatgtctggg ttcttcatct tgtaaacaac agcttgctat 420  
tctgtcttaa ggcattctca taatgaaaac taagaaattc aatgtcaggg aacaacccag 480  
accttatggc cccatgtttt acaggcacag gtatatgg 518

<210> 954  
<211> 550  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI176247

<400> 954  
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tagtaatcag tgaagagacc atctgggttg agcaagtaga tggcaatgga atgggtccaca 180  
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gcatgggcca cttgttctgt agaaccagtc agaccagca gccttgggtg gaattcttgc 300  
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tgcaccaggg gcagctcagg ctctgcctcg agcttctgca ctacctgcac cagcttttcc 420  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI176266

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tgcggctaca agaggagtcc gttgagatcc ctagtgttgt cagggtgtga ccacaatcac 180  
ccgcccagct ctgagccgga gaacctggaa gctatttcat actctggtgc aatggcaaaa 240  
aaaaaggaat taaaaaaaaa aacagaagaa aggaagaaaa ccacaccaca acacaaggaa 300  
gaattaagtc ctgaatgact ggcttcatca tgcccaccct ctccacccta aaatggcaca 360  
aaagaaattg ctaactacac cctaaagact acttttgggt taaaacagggt aactgatggg 420  
ctaggatggg aacagggcac gatgggaaca gggcgtgacc atccgataaa aaaaaaaaaa 480  
aaccgtccct ttcacgtagg tgtgtacatg cttccgagca gacaggatcg ggacaccggg 540

gttcgatgtt caggaagtc

559

<210> 956

<211> 497

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176276

<400> 956

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tgcttccagc acaagcgaag tcatgctgaa cgtcccaact agaggcaagc tgatgaagct 180
tctgttttgc cgtgtgagcc ttggcttgga agaacttaga cagttagaaa tataaataaa 240
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cgtccaaatg tcagcgggtc aggagagggtc ctgcagggtc acagttgatc tatcagaaac 420
catggcttcc taggtggccc ttaaggaatc atatgccatt tttcaccagc tcatgaactc 480
cgttctcacc tcgtgcc 497
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<210> 957

<211> 572

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176284

<400> 957

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tagggcttaa aaattctaga ccgaaccctc ccaaataatc cgttagaagt tgggtgatttc 180
gtgtggctgt tagcgtctgt cagcgatttg atgcaaatgc ctgacacaaa cgtccttcag 240
ttagaaccgc acagaaggaa agggacggat acggtaaaaag cttcttaaaa atcaaaaacta 300
gtagctttga ttgcaccttc aaatttttac aagcaaaaaca atcttatgca atgccatcat 360
acataatcta caaatataat aaaaattcac aaacattttg tgcacactgt atatacacat 420
cacaatggtg cgattagaat taacacataa catatacaaa atgaacaaaag tttaggttta 480
gacaaaaaac ttattgcagt cttttgaaaa ataacttgat tagatattcc tttgtcctct 540
tagactaatt tacatttata cagagttgac tt 572
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<210> 958

<211> 525

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176294

<400> 958

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tgagcgggtt ccgcagcacc acaatgactg agtccccgcg caggaacatc ttggagatgt 180
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ggcccaggag cttcttggtt tttcgacagt taatgagcac ttgctgtgtt tttttgaccg 360
actgtgtgag caccgagagg ggacctgtgt tgaattcctc ctctcccgcc ttctgcagct 420
cctctggggg catctcactc ttgggtttat tgaggagact catggtgaag gtttcgctag 480
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cagatcactc ccgcctccaa gcgcgttgct ttagccccctc gtgcc

525

<210> 959

<211> 672

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176298

<400> 959

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aaacatttat acagtctttc ctctctaact ttataactgg tctaaacagt ttccagcatt 180
tctcacagag tctagttttg ctcattaaaa tcaccatttt gcattgtccc aggagacttc 240
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caaatttact gtgaggctct gagaatctaa tcacaggctg ctgaccagtg tccttggaat 660
ggcccgctgct ct 672

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<210> 960

<211> 566

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176319

<400> 960

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cacgtaggct ccggtttatt gaggtcggct ccagcatccc tgagcagttg gaccatctct 480
gcatctttgt ggatgacagc tacatggagt ggggtgtggc catcatagtt ttcagcttct 540
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<210> 961

<211> 646

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176363

<400> 961

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ccaaaccagc aaaaaggctt aatgtttttc ctgatgaaag ccagtttact atatccaata 180
ctgattctgc catttgtctg tagaaatact gagttactgt ctggagtttc caatgtttac 240
ctataactga ttataatggg tagagcgtag agttttctat ttatttccag gtgaactctt 300

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cacatttcct ggcttctgaa aatgttgctt ccacaaatct tctacaacta tgtaccctcg 360  
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 gtaatagaca gaggcaccta accccatgaa gaaaggagga tacaccagct tctttatttt 480  
 tgaacctcta gcaaaaagga gtccaacaaa accagcaaaa ccaataactc cgagtcttgg 540  
 gtaaaatcca ggaggtgcat tttgaagata gttatagttg tctacttccc actggacaaa 600  
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<210> 962

<211> 639

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176365

<400> 962

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 gtttttagttc tctaataattg tttggtataa agcaaataatg acttggcttt gacgaagaca 180  
 acttactact ctaaactgtg gcctgttcca aaacgccaac actgagtaaa cacagactca 240  
 caactatctc tgaatccaga cattacaagt gaatttaata tgcagttaa gaccagaaa 300  
 tgaaaagtga aaacaaacaa aaacaccaca cacaacttgc caacttgatt tgtttaaaac 360  
 taaacttgga tatgtcaggg aggggttcaat agccacaaaa gtcaggatca gagtccccag 420  
 gaaaacatac ttcagagaca ccaaagttaa aacctactaa actttgaatt gtggtgggta 480  
 ctatttgtcc acaatcagca tgtcctgttc taatccatgc agagagcaaaa ggtatttata 540  
 aactaggaaa acaggctgga cgccatatct cagagaaaaga atagcagcct agcttgcatt 600  
 cttgaagcct taagttctat cccaagcaca agaaccaaa 639

<210> 963

<211> 540

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176423

<400> 963

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 taacggagtt tcaatggata atgttgaaca tgcttttgct gttcagcagc taaggaaaag 240  
 tgggaaaaaa cgcaaaaatt accatccgaa gaaagaagaa agttcagatt cctgtaagtc 300  
 acccagaccc tgaccagtg tctgataatg aagatgatag ctatgacgag gatgtgcacg 360  
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 atagaagcgc aagcagggac cggagcctgt cccctcgctc agacaggcga tcagtggcct 480  
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<210> 964

<211> 370

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176456

<400> 964

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 ccctgggagc acttcgcaca gccacgggg cagcaggaac agcagctttt cttgcaggag 240  
 gtgcatttgc attgtttgca tttgcaggag ccagcgcagg agcaggatcc atctgtggca 300  
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<210> 965

<211> 675

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176465

<400> 965

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 gcagtgcccc tggatctgtg cttctctggg gggaagagtg cagtagaggc cactgactct 300  
 aatcagtgcc cctgaagagt aaggccaggg ccagggcagc acctgcttcc acacacttgc 360  
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 ccgggagctg ggctccttgg agccctgtac aggaggcagg cccttgagac acaccatcct 540  
 ccattaacct gaggctaagc ctgcatacta ggactgactc tggggagacc agggccacc 600  
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<210> 966

<211> 590

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176472

<400> 966

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 ttgcagcccc ggggccacag aactgttctc attgctttcc ctaaaataac actacaagaa 180  
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 agagcacacc taaataaaga ggaaaatata atataaaaat aaaatccaaa atgaatgcaa 360  
 taagatgggtg aacattatgg gcattttaaa aatctacata atttctccag cattttcaaa 420  
 caaaaggaaa agacaggcta ctgtttctag aacttgcttg ctttttcata aattctactc 480  
 tcttctatga caagagtgtg gacataaatt ttaaattgaa aaaagaaaaa aaggaaaaaa 540  
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<210> 967

<211> 630

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176473

<400> 967



<212> DNA  
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<220>  
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cggcactcca ctgccatcac tggagtcagt gcacctctct gaaacaaagc cagcgtgaaa 180  
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gtttgtaacc acctcaccca gctttctttt cactgtgcct caccctccac catccactcg 480  
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aggagagcag ctattctttc tagttctaata tctgtcgtgg actccgtagt gtgtgtaata 600  
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<212> DNA  
<213> Rattus norvegicus

<220>  
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gatgcggaca tagcgtctt cgccaccgct gctgtagctc ttgccatcgg gatggaaggc 180  
aacactggtg atagggtcaa agtgccctt gactcttcca aactcttctt caaaagccaa 240  
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<210> 972  
<211> 498  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI176540

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atcacgacct ttgaagtgcc ggttctcaca ctggtgtttc cagtgcggac aggaggcccc 180  
tttgaacatg tgacacggtc catccacgcc aagggtgtca ccctcctttg ccgtcctacc 240  
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cacggcagcc aggagagctg agaacatgat gaaccagctc cgtctggaga ataaatagtt 360  
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<210> 973  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 gaaaacaagc cacttgggga attcctgtca agttgtttta gcttgtgttt acttctaaga 180  
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 ctttaatttg tctactaaag gaatccagct caacagctaa acacttcaga ccacatagtt 300  
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 aacctatagt atcacagtat cacatgtaga aattttttacc ttcccctagt tttcatgcc 420  
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<210> 974  
 <211> 575  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 tgtggtgacg gaagccatgg cttcaggcat tctaagcaag cattcatcca tctgagctgc 300  
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 ctggtcttgc tgaacctcat taccatgatg agggaaaaaa aacctagaat ctcaaagact 420  
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<210> 975  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI176590

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 tctgatttac agaggggaag cgaattccac agcactcatt ctgaacacac tttgaacttg 180  
 aattctagt tctcctgtgc aaaagcaaaa gactgtttcc cccttgcat caccaaacat 240  
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gaagcagagg agaaaatgtc agtgagcgag aggcttgtag aaggacagtc agctaggggt 420  
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ttattaagcc tccatgtctc gtaatatata aacaaacaca aacaaaaatt acgtgatttc 540  
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<210> 976

<211> 655

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176596

<400> 976

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ctttagtagt ttatttttaa aaatattccc agcttgaggt tgaaacattt aattttgcat 180  
tccaaactct agaatcatga ttttcatgtg agcttaaatgc agaatcacag caggaaaaaa 240  
aaacatttaa ttaatttctt ttatttgcga ttaaatcaat aaaatctctg actgctacag 300  
gtctccttta ataatatata tcgaacttct attggaacca tattgctaatt gcggtattac 360  
actcaaaacg caaacaacaa aaatacggta taaaatctaa atgtgaacgt tgctgagtc 420  
taacatgtac attaaactta gggtttaatg tatttttacc tttcaatttt ttgaaaagac 480  
acaaaaaaag ataaaaataa atatttttct cttttgactg tttctgactt gaatgatggc 540  
tccaaggata cacacaggaa gcagctttgc caagtcagtc gctgcaaagg gcaatgaaca 600  
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<210> 977

<211> 511

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176598

<400> 977

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ctttctactc acacagaccc caggtgggaa gacctaggct gtcccttact ttctaccctt 180  
ggaagttgaa tacgaacaca tggcacaaga tgaagcagaa atatggaagc tacatgactt 240  
ccttttagaca catatacacc cagagacccc agcaaggccc cgcccagaaa gtcagtgtag 300  
tgtttctcaa agggagaaga gaggtgacat cggaataaaa atgcaaagct gaagaaaaga 360  
ccagatgatc aaaccattat gtctgcttca tggagcaatc aggaatcctc agaggatgag 420  
gatctacagc ccagtgtatg acatgacacc agcacctgtc agtagaagcc atgacctccc 480  
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<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI176616

<400> 978

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ctcctgggtct cctagccaga gtagcaaatc tgaacttcta ttcagggtcag gactgctatg 180  
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<220>  
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 aacatctgta tgtgcaatta aatactgtgt ctgttactgt ggtggcaca acctcaaaca 180  
 aacaatatac aagtgttctg gggttggatc aggggtcggg ggagtccca gttttaactc 240  
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 cttaattctg tccatataaa tatattcatg aagaccaaaa gagggaaagg cagttgggct 360  
 ggtgatgaag tgggagaagg ggagggcata tccctcttaa ctctactcag ccaaaaattt 420  
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<220>  
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 gagcaggcta gggaggtctt ggtagtagag ggcttttcca gggccaaga cagaccgtg 180  
 gctcagtgcc cagcaacaaa atgagaaaaa ggtaggtgtg tcagacatag acggtttgta 240  
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 aacaacacta tctgaaattc aagtggagcg tgggtgtctt ttttgccaag ggaaagaagt 360  
 tagtttccag aaaggatgaa cattaagacc tttgtgcttc tgtaacagaa gttaaagaac 420  
 catggaacat tactttgggt tcaacaggat ggtgtttgtt caaggctgag agcctcaagt 480  
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<220>  
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 taaaaatata ctgtgatgga actgtaaagg gaactctgac taaaatcctt tctttttgca 180  
 aaactcaccg tgcttatctg catgtctttg gaagaagggt tgctaaaact ggatcctagg 240  
 tgggtccaggc agagagaagt cctttaaaac ccagatgaaa ggtactggag aatgctcccc 300  
 cagctgacac taaatactgg agggcagcca tggaggactg aagggtgagg cagagatgag 360  
 gtgcttagtg acagaaccca aggcctggct aagggtcctt ccatgtgaca agcgctttcc 420  
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 taagcaactc actgccccct agacctctaa tatgtacaga tgcttaaaac agcaagtccg 540  
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<210> 987  
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 <213> Rattus norvegicus

<220>  
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 ctggagagct gaaatgtggc cctggggaga atgtgtatgt ttccagtctt gatgttgggg 180  
 gtcattcccag agtaagggaac tgacaggctt gagactgagg tgctccaagc ttcctgaggc 240  
 tctgaaaggg ggactgacta cgctcacacc ataagctggc cactggacct agagttccca 300  
 cctctgtgac cttgttgttg ctactgctgg gcacaatgga aaacagtcaa gccccctggg 360  
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 ccgaattctt ggctcagagg gccaa 445

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 <211> 574  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 gcaagggtgg cgtggccgct gaggccctga aggacccga ggtgtgcaca gaccctctc 180  
 agctcaccac acacgccatg ggggtcaaca tctacaagga aggccaggag gtggccctga 240  
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 tagaggacct agaaccggag tcccagagat actggcgact gcttcgcaaa cagaacatct 360  
 gggtgcacaa caggctgagc aagaacaaga agctgtaatg tgagtgtggg cacttcctcc 420  
 caggagccag cctggtgcca gccagaacgg ggagaaccga gtccttcatt cgctcaccgt 480  
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<210> 989  
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 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI176839

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 catgcctttg aacctatgcc agccttgtgg ggggtggcagc aggactagac tgctattctg 180  
 tgttccaagg ggtacctgaa agcaagaata gaccaacact ggcattccgtg ggttcctcag 240  
 gccaacgcgc tcccctctga gttcaccatt cattcaaagc ctggtcttgg ccgtcagcaa 300  
 accttgagac ttaaggtgct cggcgatttc tcatctccct ggaggacctt ctctccctcc 360  
 gacctccatt ctgtactgct tgatcagtc agccatctgc aaatgaatat cacaggggaag 420  
 agacctatcg taaccacgag aacacctcac ggagactcac ctcgtgccga ctggtgcc 478

<210> 990  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI176841

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ggagaagggc agccacagag gcagagagcc cctaagccag agctactggg ggtatatggg 180  
gaagcaagaa gatcagggac ccatgacacc ctagegtctc ctgcccagcc ggttgccctga 240  
tgcagggcct gagccatcta catggtgcaa cctggtgggg tggcccagga gcttccgtca 300  
cctccagcct cctggcatgg ggtgcccagc ctctccatcc caatatgggg ccaggcaggg 360  
aacagagtgg gcagtacact cacaagagca cagtccctct agccaccaga ggttgccagg 420  
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catcacaagc acaaggtaag aaatacagaa cgagctagga ccacagcaag aactgcacat 540  
gcctggaggt caagccaccc tgctcaggtc ctgcatgtga gacggctgcc gtctgtccat 600  
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ca 662

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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI176901

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gccccaaaag gcaggcgaaa gctgagacac cagtactcaa ctcacacctt ggagctgaag 180  
ggccagttaa ggtggctcta gccatacagc cccacctccc cttactctgc ctcttcagc 240  
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ggcagggcaa aggtccctct acggatcttg ccaaagagca gggctggttc agagtcctgg 360  
aacgggtatc ggccagccag catggtgaag agcgccacgc ccaggctcca gacatcagcc 420  
gctctgccgg agtaggatgg ccgggagctg agtatctttg gtccacata ggcagggcac 480  
gcgtgcttgt cccacaga 498

<210> 992  
<211> 575  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI176942

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actgggggtc ctaagaggct tctctctgcc tgggtgactt tagagagggg ccctcccctg 180  
ggtctgctga tccttagtca tccctcaaca tgaagatgct tcagttcaga ccaaacagat 240  
acaggagact acaccactc cagatcttat atctgtaat catccccttc tatacctctt 300  
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gctatatcac agatcactcg ctgattctca gcaattggac aaggtctgag tctctggagt 420  
aactaccacc cactgtgaaa ggctcccttt accactgagg ctggcacagc agtcataggg 480  
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acaatactag tagtagtcta cttactatgg cctat 575

<210> 993  
 <211> 435  
 <212> DNA  
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<220>  
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 cccacagacc tgtgggtcgg gacagcccat cttttccctg ggatatgaat gcactccact 180  
 tcgtcagcca gcctcccagg cttggaatct aggtccagac gcctggctgc agctcccagg 240  
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 tagaacagct gtcacactcc atggccaaca gagaaaactg tcctggcctc ggggagacag 360  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 agtatctttt catgtactga atataactat tagcacagtg tcaaaaatgt tgaagacaga 180  
 aacaaaataa aaatctgtga aatgtttgcc actgacgaca ttccacaccc tattttattgt 240  
 ctgtacatat gggggagggg gagacagcca acttgaaagt gaacggtagt acttttcttg 300  
 atccagaacg gtttgcccca catctgtttt aatcttccag ttttagcatat ttgaaaactt 360  
 aagtctgtac tgaatgcat agtttaaaaa aaaaatgaag cgagacggca gtttgtgcag 420  
 taatatctgc ctttcaaagt tcatgcagcc aagaaatgca atttttctt tcaactcataa 480  
 atctgaatgc agtgccgagc catttgaaac catctacaaa atccacaaga ttaagcagtt 540  
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<210> 995  
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 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI176970

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 ttatcaactg acctggacca tcaactacaa aagggtctata gtttttaaat aaatgtgtga 180  
 caatgcaaaa taaaataaaa acctgttaaa cacagagtaa actttgcttt aatggatata 240  
 gaaaggaggt gatttggttt gttttcaaca catctggttc tggcagcaaa taataatata 300  
 ggtagcaat gtgccctgaa aatttctgct ttctgcttgt acttatcact tgaatcagag 360  
 gccagacatg cggaaaatgc tctaaatcct ttaacaccct cttccagaa agccacaacg 420  
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<220>  
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 atcaatgagc cgaggtgtct gagccataga atgggtcagct aaggctctgt tgaatttgac 240  
 ctaaaaaggg aaagggtgac ataagaaccg atctaatttg ccaaagttaa agttgtaagg 300  
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<220>  
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 ctttgtaagg aaaatgttct gaagcgctac cgtcaaggac tacagaaaac tgccaccac 180  
 agataaactg ccacagtaag tgactacagc gtggctctgt cactcatacc agacaacccc 240  
 aaataaatca tttatgaaaa gaattaaagt ctatcaaaac cacttaaaat agaactctta 300  
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 gggtccaggg agaatgaatg gaatgtttta gctcaggcca accaacacag ccctcaactt 420  
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 aaaggcagtt ggcaagtga atttctacaa gctcatgaaa acaataccat ccaaacggca 540  
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 <212> DNA  
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<220>  
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 gcggtagaca acacccaggg cccattttat tagaagccaa agggcacaga agaatgttgg 240  
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 tgtgagcaga gcagtctcta ttcccaagca ccaaggaggt ctgcttccaa tggcacgccg 540  
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<210> 999  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI177038

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 ctccgtcaca tctaaattac ttactcttca acctctaaac ctgcttagag gtgatcttta 180  
 aagaacagta agatcaacga tatacagtag ccacagatgg ttcattcgca ccttactctt 240  
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 aaatgagaaa tggaatattc agagagtaaa tgatttctta agctgaatat ggtggctcat 360  
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 gaactagtgt gagatgatgt aaaaaattaa atgatttcca gttccaaaaa acaaagaaat 480  
 taaataactc ccagcccaa gtggcaaac ggcatggga cctgccatgt ggcaaaagct 540  
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<210> 1000  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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<210> 1001  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI177055

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 aggcattacc ctataaacac acgtatgacc acccatgcac acatacacac aacatacaca 180  
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 aactgcttaa gaagaaaaac aggggaatac tggcaattta gcagcagcaa acagccaagg 360  
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 aatttgctgc actttacaaa cagtggaaaa gaaaaaaaaa gtatttggaa tgttagacac 540

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<211> 404  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI177091

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<210> 1003  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI177099

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ctatgtaaat gtttgaatcg gaaacattat gattgcccatt tgcaagcttt gctattgtca 180  
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ctctgaagca tgtttggata aggcaaaaat cagagctctc caaaagctga aagtttaatt 360  
tacttgccaa atatccccta ttaaccgaa catcaatatt ttaaagtctc tatgtaaaaa 420  
gtatgctttc agactgctta aatgctataa cgcacacaac aattttcaaa taatagaacc 480  
aatagttttg ctatttgaag aatattaggt aaaagatact atgtgacaca caccacaaga 540  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI177103

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gccagtgtca gcagtgtgg aaccaacact gctgctcctc tgggtccacac atgaccagca 240  
gttggggaga gtttacgctc cccagaggag gaaacctttg cctctgtttc ttatacatat 300  
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ggacttgcta agagacaaac ccatgagccg cctgtcccc taacccttag gcacatacta 420  
gatctacagc tgccccctt gtcaacatcc accttaagtc agaactgggc tctccgtggg 480  
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605

<210> 1008

<211> 616

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI177161

<400> 1008

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agttttcaat agtttgcttt tagccagatg tcatataagt ctatgactgt aacaaatgag 180
aacagtataa ataagttctg tagtatttac acttacacag aaactagccc aaatgggtgcc 240
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taaagtttca tattatttct acactagctt tggctataat tctgcatagt tacttataaa 360
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agaaaaggct ccattctccc gaacctagtt tttctttgta tctggcttct tgctcttggg 480
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tttcccatcc tcatcacgta acatgctgaa gacttcaga tacaaagtgc tgagttttct 600
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<210> 1009

<211> 563

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI177181

<400> 1009

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cagagtgaac agagtctaga aacaggctaa ggcattgtga atgggctatt gagaacggaa 180
gtgcccagtg ctaaaccagg gcctgagtga tcaccacca atctgtttct gtgggaacag 240
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agaagctctt taaagcatta atcagcgggtg tacacactag gcgagtgaac actctgcttc 420
cagacacgtg aactggattt ccaagtacac acagggcaga acccgagtg cacaggcagg 480
gccagctgcg tgggctctgt aaccgatgt gcccgagctc aattcccgtg tacttactgg 540
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<210> 1010

<211> 537

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI177341

<400> 1010

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ggtaacaatc cattctaaat aaagtacttt aatgctgggc atacatttat ataattatct 120
tgacagagta agaattagaa ataccaata catttttggt agactgttgt tttaaaatta 180
acactggctt tgacaaaagc agttgggggt taagggggac acgaaggtaa atagcagccg 240
gtcgtatta atactgctat ttccctccct tatcacactc cacagttcaa tttatttatg 300
ctcctctctg ggataaccag ctctgtccag taataaagca gtaaccttat tgcacacaca 360
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acagaatttta ctacaaaatg ccataaaaat cgcttcaact taagctctct ccccccgtat 60
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cagattggta tcttcaaaca accccaccag gtatgcctcg ctagcctcct gaagggcacc 180
gatggctgca ctttgaaacc tcaagtcggt tttgaaatcc tgggcgatct ccctcaccaa 240
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tcttagagcc acggtcccgg gcctgtagcg atgaggtttc ttcaccccg cagtagaggg 360
cgcgcttttc cgggcgcgct tgggtggccag ctggtttgcgg ngggctttcc ctccgggtgga 420
cttcctagcg gtctgcttgg ttcggggccat cttctctcac ccaaagctga agtctgaggg 480
ccttgctggg accgacgcgc cgctgtaagc gctcgaacaa gcgccgcaat cgcagagcag 540
aacaagacga agtccttca acgaaccctc gtgccc 575
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<210> 1017

<211> 521

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI177638

<400> 1017

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atctttccag gttgctttgc atcattaatc tgcattttta cttgatcttg caatttagaa 180
aagaatgcct gagatgactt taagggctta tcttttcggt catcctttaa caaggacact 240
ttgcctgttt tgggtcaactg tttgagcttc tcggaagctg ctgccctgct ggacttagaa 300
tgatctgggt tgetcttttc aagcaatttt ctccgcttct ccttctcctt tattttcaaa 360
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gctgttttta gatctccagc tttatttttc tccttgattt cctctggggc caggaggggt 480
gcatcactga cactcactgg ggccactttc tccatggta t 521
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<210> 1018

<211> 429

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI177790

<400> 1018

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tgtggtgtgt caaacaagaat tgtttagggg agcaggccac atggcttgtt gtctcccacc 180
aacagcagcc tccagccttt caggaacgtg gccacaata gaggtatttt tgttttagtg 240
gtctcttagg caccgtaatt gaaacttaaa atagtatagc attgtctctc acatcctttc 300
ctcgagttgt atcccagatc gaatccctgg ctctgcgatg ggtacctgtt tacactggga 360
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tgagcaaga 429
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<210> 1019

<211> 565

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI177869

<400> 1019

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gacgcgtgcc agctgaagtt attgtacgtc actcgtgca cttccgggtc gatggcattg 240  
tggcaccctt gacacaccac agcatggttc ttcacatagc acggcttgca cacaggcttg 300  
tcacggacca tcacgtatat ttttccggcc aggatgttgt cgcagtcaaa gcagcagaag 360  
tgcttcagat gccaatcttg gttttctgccc tgggtatact cattgctgaa tatcagctgg 420  
caggaggaga aaaacaaaac ccgtcaggca tctctctcct ttaccccgca ggaactcacc 480  
cagctcctcc tgatggccgt ctaagcctac aagggcagat gccttcttga gggctgaata 540  
tttgaagatg gtaacgtcag gcttg 565

<210> 1020

<211> 647

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI177885

<400> 1020

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cctgatctga cagtatacca aataaagctc tggacaagca cctcctaaag cttggaagaa 180  
cgcccggcac gtctcctctc tcgcactcac tgcactacga aagactaaag agaaatttgt 240  
tctgaaaggt gacttgctta gtacaagagt tgagttcaag aagttaatgt tttagtgcac 300  
tttgctccag ttttagccaa catgctacat tttccttttt gctgttgctt tgttttaggg 360  
ggaagtgggg tgaggagggtg cacaaagtag agttgaagat ttccactgtt ggaaaaagag 420  
aggactctgc aagcaaaaact ggaagctgcc ttgtacctta agacctgaac attttaagac 480  
agaagctttg caaaacatta cacaattttt tattattaaa tgagaaaatc tcatttggtta 540  
catcgtcaca ttgctagtca agagaaatgc tgcagtgatg aagaaagtca atgttggtac 600  
aaccaaaagtc cttatttcta caacattcat ttacaaagaa ataatgt 647

<210> 1021

<211> 395

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI177911

<400> 1021

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agcatectct tagatctgca gttgggctca acgcactcca gtctcagcac aatcttcttt 180  
gtagtcttag cttttttgcg gaaaatgggc ttagtctgcc cgccgtagcc actctgtttc 240  
ctgtcataac gccgctttcc ctgggcatac aaagaatcct tgcccttctt gtactgcgtc 300  
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<210> 1022

<211> 558

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178025

<400> 1022

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ggggatcatgt tccacatggg aacagagagg cacaagggt tctaagtatt gcacagtctt 180
gaaaaaaaaa aaaaggagtt gggaggagaa gatcacatga tactgggaac gtctcacatt 240
atgagaaact accaagaaac attcgaaaag aaaaccctct gtttctacag tagcttttagt 300
ctgcagttct tggaatgact attccattga agacatctta gtaacaggaa gcttcgtttg 360
agcaatccca tgtgcaata ttaataggaa aatatataaa ataatgcac tcttgccatc 420
acccccggca attcaggacc gtatttttga gaactgtttt gtttgacact cggttaagct 480
gtgagtttgg cctgaagctc catctctgct gcctgcttga gcgcaacgct caccaggagc 540
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558

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<210> 1023

<211> 566

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178027

<400> 1023

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agcttggggtc gggctttgag acgcgctaca taggcggaga gcagggggaa gtctttcaag 180
taaccaggga acaggagctc taggttcaga agtaaatcca gtaggcggta gtcggcgaag 240
gagatctggt caccaacaat gaagcattgg ccacccttgt tctgggccag aagagtttca 300
aatggcttca ggtgtcctgg aagctccttc ctatattggc cttgtcttc cttacagata 360
tgagatagtg gccatgcaat gcgcctgaac acgtcttcca gtccgtcgtt caccatgtcc 420
accagtgtct cctcttgctg gtctttgccg tagagcccga aggagtggcc caggtgccgt 480
aggatggcat tcgattggta cagagtgagc tttccatcct ggaacttggg gatctgccc 540
aacagacagg aagccttgaa tgtgcc
558

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<210> 1024

<211> 475

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178073

<400> 1024

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cctgtgatga caacttcacc agctcctcta aaagcactgg ctccgaagga agcattctga 180
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caggagacaa gttccgcagc tccgtttcaa tcccagacgg gcctaactct ttcagaaggt 360
taagagcccc ttcatactga ttattttgta atccttcttc aagtttcaag tagaaatttg 420
atttttgagc caaaatccca aggtttacca ccttaaactg ctgggggtca ctgggt 475

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<210> 1025

<211> 599

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178214

<400> 1025

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aacttttagat ctaaaacgcc cctcggcagc cgccttcgcc tcacgccggt cctgtaccat 180  
cgtcacgttc cgaagagaaa tcaggatggc agcaaagctt cgctccctaa ggatctgaac 240  
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tgctgctgta gtgaccagtg tttgggagag aacatcagtc ttcaggagcc acgagctgac 360  
agagtgccat ccagtgacct ttccgagaca caaggtgtgg ggcacacgcc atggagcgag 420  
gttcggatga ggacagagga ggggtgctgt tcatacagtc tacttcaagt aaaaaaaaaa 480  
aaaattcaca gatacccatc agctgctact ttatgggcta acagtgtctt aatcggagaa 540  
acgaatgctt tgcagacgct aagcacgctt ggaggagtaa ttaggggacc aggtggctg 599

<210> 1026

<211> 660

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178231

<400> 1026

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ccttgtttaa caagaacaaa atactttcta atagaggaaa ttaagaggta ttatagaaga 180  
gtttagaata acatgaataa atcagaggta aatattgtga tttttcaagc aaagaaactg 240  
atataacaag tcacctacaa agcaacacaa tgacttggtt cttagtgcc aacagtcctc 300  
ggttcctgtt gtttcttaga ccagagtctc ctaaccagac agcacacatc caacactcta 360  
acgtgactac aaccacgaga caagctctca cgttgtagtt caggcttgct tcaaactcac 420  
tgtgcagctc aaactgggtt caaacccatg atcctctgct tctgcctcaa catctcaggt 480  
gcaggctatc agacgagctt gactaataaa aggaaacagt tctgtcacca cagttactgc 540  
taacaatatg caagcagtta agtttccac atagatgata ggcacatgcc aactccaaca 600  
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<210> 1027

<211> 488

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178326

<400> 1027

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ctttgctatt taagggtctg aatgtttcag ctttttaaag gaaagcagag atgtatggta 180  
cagctccctt gcaagagggg attcagattc acagttaaca tgaaaatcat gtagcagacg 240  
tgtgtggagc attcttcgta cactgggttg cagcagtgac attcacacag atttccagc 300  
gtcctggtaa gcccggtgtc gcagccttac cttcccatc cgtggaaata caagttcgca 360  
catatacaca gcatgatgat agaaaacaag atatagtaaa tgagattcct aaatttcggt 420  
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atgcagac 488

<210> 1028

<211> 552

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178483



<400> 1028  
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 actatgtata atatattggg ccttacaaat tcaatatatt ataaatcaaa taacatagca 180  
 cagtcatact attattttaga cagataaacc acacattaag aaatctgctg tgacttttaa 240  
 aagaaaagggt aaaagttaga gaatctctaa tctgaaaagt aagacaattt ctattggctc 300  
 attttttttaa aaaaatataa aatgcccctt ttagactatc tttgggtctt ttagttaaag 360  
 agaaaaatgt gtttcatttg ttcttagtct aatcttccat atctaaatgt ctaaaaataa 420  
 ctcttaagta tcagaatcca gggatgtaag ttttgcttta aaaaatacat agaatcctaa 480  
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<210> 1029  
 <211> 552  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI178491

<400> 1029  
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 agtttccttc taagctgctg ggcacacacc atgttgatac cagaagagag agcacgatag 180  
 caaaccccca tgaacacctt agtactattg aacaatgaca ctgtcataaa cagtaaagag 240  
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 aagctacagg acaggatgaa cactgcatct ggctcatatg tgatatgtgc aggagaaaca 360  
 aaccacacag tataactgt atgtgtatgc atccttaggt tctgaggaca atgtagcgtt 420  
 gaataaaagt ctagtgaatt tgccacttgt cctgctccag gacagttacc gtcaaaactca 480  
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 aaaacttaaa aa 552

<210> 1030  
 <211> 586  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI178507

<400> 1030  
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 atttaaaaaat cacaacccat tggagttgaa gggaaacaaa gaaaggaaaa acaacaatgg 180  
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 agaaagaaaag gaaggaagaa agaaaggaag aaagaaagaa agagaaataa gaaaaggaaa 360  
 aaaagaaaac acatcacttg gcaaaactcc agcactctat gtgactcctg ttgaaacatg 420  
 cacctatggg actgctcact tagctggtag aagtaggtct aattcagtgg gttcatgcac 480  
 tatccggggg gagcaatgag gtcagcgcac acctcctcgt cagtgtcgca gtaaaagtag 540  
 agcaggtgaa gtgggaactt gggcatcact tgacactctc gttggg 586

<210> 1031  
 <211> 552  
 <212> DNA  
 <213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178527

<400> 1031

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aaagcattag tatctttatt atggcataat gcagtacttt atacagtaat tcattttaat 60
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acaggtaatt caaaagtcca gagttacttg ataaactgga aaatattttc tctgtagaaa 180
atagtaaaaa tgataacatt tcccactaag cccatttaag ccaaataaga gctgaattat 240
acataaatat tggatagatt gtgtgaccca aaagaaactt ctcttgcttt atttgaaaag 300
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ttttccgcag atcatttttt ctatagggtg acccattaat tcaaaattca aaaggtttta 420
gttttaggct gtcctcttgg aagtagagcc agcatgtcct tctaccatct tgaaatggcg 480
aattcttacc caatagtga atgtttcatt aaatcatgcc catatttatt acaagccaga 540
gagtcgtcaa ca 552
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<210> 1032

<211> 603

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178531

<400> 1032

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accttaaaaa ccagtatcag ctttttaaag ttaacagaaa taaaatgcca tgagtattta 180
agtatatatt tgtaacttaa aagaaaactg gtaaatgtcc atcctgtgtt ctgcagaagt 240
ggggactacc caccaaaggg taccatgttc tttactgtgg taaagacagg attctctcat 300
cacttcctgg ctttttagtat aaattcta atgactgacaga tacattacac ttagtaaatg 360
caatgtttgt gttttacttt ccagaaattt agggaaaaatt tacagaagca gatatcaaaa 420
agtgatttaa tgccattaac aatcaattca aattttaaga gaatactaat catatttcaa 480
aattccctag tctataccac actcctcccc tcccataaag ctcagggaac atggaagaag 540
aggagtgaga gactgtaaga gtcagaagtc caggaggcat ggataaactg acatcttttg 600
ggt 603
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<210> 1033

<211> 503

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178533

<400> 1033

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caccgtcagt agatcctcca ggaatgcagt tggtgtcac cccaccatca ccgccccgat 180
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gggagaactg cgcaccgggt ctcagaaacg cttcttcttg gctcgccttc cagctgagcc 300
cttgcccgt catccaagcg cctatgaggt gggcagcagg aagctcgggg ctgaagtcag 360
tttctgggtc cccaatggc agctgttgaa cccctggatc tagtatagaa tccacagctg 420
gggacagggt ggtcacccat gcagatgcct cccgagaggg ctgtgcaaca aggcgctggg 480
atgtgggatc tagattcctg gaa 503
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<210> 1034

<211> 574

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178573

<220>

<221> unsure

<222> (1)..(574)

<223> n = a or c or g or t

<400> 1034

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agccagggat ctatgaggct gacttctgtt ttcattgatg caccatatgt agtatgtatt 180
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gactgtctga gatctttaag gaaatgtatt actttaccct nccagcttag gctgaattta 480
cccaagtatt cctagtcccc tagtcccagt aacacactgc cctccaatcc gtcctgggta 540
cccaggaggg aatgaaagaa agggtttgtg acat 574
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<210> 1035

<211> 635

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178602

<400> 1035

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tgtacaatat aatacatttt acattacata tggggctttt atacataaag atgagatatg 180
atztatgggt actggaaatc caaacaaaat ttgaacagaa catttctatg catacaaca 240
caattgctca gctgtgaaaa tcaaaacat acataagtgt ggttattaaa aactaaaact 300
acattcacct gataataaca gaaaatgaaa ttgcttttat tattttgaaa gtaccacaca 360
cagattaact gtggcccat tcatgtgtt aacaatatcg acgatctaaa ctaaaatatg 420
tgctcatttc ggggaaaagt ttccaatttg cgttttcttg taaaggatgg atattattat 480
tatttatagc cattagaatg ccttgttcat aggccaaggc aggtcaattc tgggtaata 540
gtaaagccac taagggtggg gtgcctatca tagtgctata gatattttac catatactct 600
taaaaataat catattaaac ttagctttt catgc 635
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<210> 1036

<211> 438

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178629

<400> 1036

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ctcctaagac tgaagtagcc ccaggctcct gagtctgcc a gctcctcagg gccgggagga 180
tgtctgcca gcagtgatca agagtggcct ctcggtactt gtgcagcagg tcaactgacgt 240
cagtgtctc cactttcacc caaccgtctt tcttcatgtg gtacatgttg acaactcctc 300
cagaatagct gtctctgtgg gtagcataaa caatagctct tcgggcaagg tcataggcct 360
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cctcgggact gaaatcctgc cggtagccac tgtccataac cccgtaggca taggtgttcc 420  
cgctgcctgg ggaaaaaca 438

<210> 1037

<211> 501

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178635

<400> 1037

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ttgtgagtga aaggaacgga acagcatttg gatggatgaa gacaatttca aaagtgtgag 180  
cacctctgaa aagatttcac ccatgtgttt ttgtttcctt gctgatatgg aggggctttt 240  
attcttgggt ctatgtttca ctagaaaagt gggatattag gatatttttc cacgtcccct 300  
tagatttcta agaaagagct caaagatatg tatcacctag caagtgcagt ttttcaacat 360  
gtcggaatcc aaataattac tacaagagc aagttttcaa ataccagaa aatttaattt 420  
acatgttcaa aatgtatgcc cgtgatggat gtttcaatcc tgtgtcatca aatggatact 480  
aaactgggtc taatgaaaga c 501

<210> 1038

<211> 487

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178734

<400> 1038

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gtgaatggaa tctgaatgtg gtaaggacat ggacttgga aacataattg aacatcgtga 180  
aattgcagtc tatgctttct ctggctctct aaccagcta tctctcagcc atctcgaca 240  
ctagacatcc tgactctacg tacacttttg tcatatataa tggcttcctt ctgactgaaa 300  
tgtaataagt taacaggatt tgtatctaag gggcttttat ctgggggtgtg tattgccaga 360  
agtgtgcccc attttggacc acataaaaac tttggcccca aaggaagctg gctgccatct 420  
ggctgtggta accgtgaggt ttccgagggt ccctggggag ccccccacagg ataatttttc 480  
atccggg 487

<210> 1039

<211> 587

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178736

<400> 1039

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ttgccaatca gaccagtga ggtcctccgg gttagggcag gagactgact ggatagacca 180  
ttagaggaag gagccatgcc tgagaaccag agccagccca gagtccaccc tggtcacggg 240  
cagctgaggg agctgtttta gagtatctat gaccatgaac acagtacaat ttgaatatcc 300  
caaaaaaaca ttattgcagg agccatggca gggcaggcaa aagcccaccc agtcccaagg 360  
gaaacaggcc accactacag aaggggacca caagttgatg atgttcaagg caagtcaaca 420  
tcaggggtctt ggggtccatct cattggaaaa gggccttcgt gttcgtgttg ggacggagca 480

tgtgatgctc tgacgcaatg ccgtggctga agctccagca cagcttaca gtcaggaagt 540  
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<210> 1040

<211> 563

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178740

<400> 1040

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tgaacatcag catctggcag tatttttggg aaaaaaaaag tgactaaaat ggggtttaa 180  
tgattaacac tattaatatca catctaatat ttgatactac atgattcaat acagctatac 240  
gatacaatta taaaaaatgt gttaacatca aagaatacaa ccaaaattaa gatagcaaac 300  
aaaacctata taactttttt ttgtacagga aaaatacttt tgaagtatgc atgtaactgc 360  
ccattctttt aaagaaaatc taccgcaagc aagtcgtcac cctccagaaa gtcacacagc 420  
attactaagc atatcccaa aaagtgtaca atatgcacac ttggaaaata caaaattaaa 480  
aaaattgtaa gcaacagggt agcttcgtat ttataagaat gtgaaaagaa gtcccathtt 540  
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<210> 1041

<211> 656

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178741

<400> 1041

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atccctagcc agtcccacat gttggtcctt gatactgaga acattgtggg ggagggagag 120  
aaccttgaaa cagttggagg gaggtattg ggtctactga gggttagggt tatctgaatt 180  
caagggttca gtgtgggtcag ggctgaggac acttggtactt aggtctcaaga tttgaccagg 240  
tattaaccta cgttccaagt tgtgtgggggt ctgaaaaatc tttagagctc aagatttgag 300  
gatgtcttgc cttagggcct agctttgaag tatggaagac catcgagtcc cacatttggg 360  
tcaggggagt atcttgggggt ccagttttga gattggccac agatgctgtg gcttagaaat 420  
ccagtttcaa ggctggatgt aagcgactga gtctcaaatt gagggctgag gaagcctgtg 480  
gtccctcggg gacgggctag aggctaagag atgaccagtt tggggctgca gtgagcagtc 540  
acaggtgcct tttcttgagc aggccagagg gctctaggca cctgttttaa tgactaggaa 600  
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<210> 1042

<211> 542

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178746

<400> 1042

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cacacacaca gagaaatgaa taaattatag ttctgacact tagagacaat ataaaaatgc 180  
atataaaatc caacatcagc taatgaaggg cataaaagcc cccaagagcc acctctttct 240  
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agacagtgat ctgggggtgtg cttcatgtct tagggcctct ggctcccat cctacatagg 360  
gcctttataa cccatggcct tggggagagg gaaatggaca gagggcatgt tagagcgtct 420  
gggcaggggg cagagggagt tttgatcacc gatgggtcaag cacagcctcc gtctgctcag 480  
ctcgaaccta cagccacac cgaagccag accggcgggg gacaccgaag actttgcctc 540  
aa 542

<210> 1043  
<211> 485  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI178756

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gttaagcctg agtttcataa ggatagtaaa cttaagggag ccacgaagcc tgaagacaaa 120  
ttcaggacag gaaagggcaa aacagccagt tccctgggtg ctttcctcac tggaaaatca 180  
aacatgtatt cttactccaa cagtcctgtc catgtttgca tgtcaccaca cttagcaaaa 240  
cacaacgaga tcatatatga ctagaactaa gtgcatagaa cgctgtcagg atcactgctt 300  
gctcttctt tttctcagtc tttttttccc agagctttca ggtgctggag tcttttgtgt 360  
gtcttcttct actggtgaca caggcagttt caaaatgatt tcatcatcgt cattgatttc 420  
catcaactgt gatttccgtc tttccaaaaa cgttggtgta caaactggcg taggatcctc 480  
gtgc 485

<210> 1044  
<211> 687  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI178784

<220>  
<221> unsure  
<222> (1)..(687)  
<223> n = a or c or g or t

<400> 1044  
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tccgagctag gccagtcag tccctggcat attcacagta gcagccctag ggcttgccc 180  
atgggcgggc agtgaggagt ttacagaacg gccagccag cagtgagcac agatgtcctg 240  
ggctgctcac cctccagtc tgggtccctg tcttgacata ggaagaacag ctgctcagt 300  
caagggcaaa aagatcccat gccctaattgc tacctgggtgc cccaggtcct ttgtgcggtg 360  
gcttcaggca acccggaag tccatagagaa tgctggccag ctctgtggag tctgtatccg 420  
agcagcctga gctgctggct tcatctcgta aagcctgcag agctttcttg ttctgtcgcc 480  
gcttctctc atcaatgggg tacagcttga agagcagcag gccagcagg atgaggatga 540  
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aggcaaaactt ggtgaagaag acataga 687

<210> 1045  
<211> 562  
<212> DNA  
<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI178819

<400> 1045

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gccatggctt cttcatagag aacttgaaaa atctcacact gaattattatc ttgtagtctc 420
ttctcgtgat aacccttgt ttcaagtcgt ttgtacaata taccattgtc tgcctcaac 480
acgaacacta tatggaacca gcgttcagga aagaaatcac aaccgtggta atcaacgatc 540
acgccgccct ctgtcatctg ag 562
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<210> 1046

<211> 603

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI178828

<400> 1046

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caggtacccc aacctaaggt aaggtgggtg tgctccagag gttggggcta gaattgccag 180
atcattccga cagactctc tgtgtccact cgctggcgct tgatgcaggg aggggtgtagg 240
tgagagtcat tcccctggag tagcagctca gtatcaacag aggcacaagg aggtatgtgc 300
tggtattcac aaaatggaag gcagagcagg tgccctgagt gaggagcagg actgggtggc 360
cgatccacac ccagtgtctg ccgggtacaa ggccctgactg ctgtggctct cctcccaagg 420
gccccagggg cccagaagca tcaactgcgtc ctatggctgg tcccttaaat gtccatctca 480
aactgtgact cttcaccacc tgcccgctta tcttccgggc tgetgtgcag atggctctgg 540
ctggcctgca tgggaggctc atcgctggta gggctagtga cccctggaat ggttggcaag 600
tcc 603
```

<210> 1047

<211> 380

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI178850

<400> 1047

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ctttttgggt ggagtgggtg gggcatggaa gggatagaga cggatggaga cagcccagaa 120
ggagcgacag ctctacctac ccctgctgct ttcctggcca gccagggtca aggtccctca 180
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gagagatgga aagaataaag cgctacaaag gctaaggact tgacgcctgc tctccagaac 300
tggattccac acaaagcagc caagttcata ctgagggaca agccaggctg ggccaacagt 360
ggttgaagag gctaccctga 380
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<210> 1048

<211> 309

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI178868

<400> 1048

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gttttctctg agtcgcaagg ctttggcaag gacgagtga gtggcttggg agcaacagag 300
cctcgtgcc                                     309
```

<210> 1049

<211> 340

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI178872

<400> 1049

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taagaattgt tttctcctct gcactaacat tgcaatgagg ctcaaaggc aagtacacta 180
ttaaatgaca ttactatca aaaataggag ttcatattgaa ttactatgaa taacataagc 240
cactgtgtgg cacatttcac catttttagac attcaactct atagaaatct ctgggctctg 300
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<210> 1050

<211> 633

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI178944

<400> 1050

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agaacatgcc aggagagtgg gtctctgggc ggatactcag agtgatgtcc cggtaaagca 600
cagtttcaaa gtagcctgca aagccatgaa gca                                     633
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<210> 1051

<211> 570

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI178968

<220>

<221> unsure

<222> (1) .. (570)



0947800.03404

<223> n = a or c or g or t

<400> 1051

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atgaatttaa atctgcaagc cgttttccta caacaagagg gaggaacatg tttccttgac 240
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tcattacaga tggtaagaag tcactctgggt tttctgttga ttcaaagtgc ttccgcacaa 480
tcgtcagagg tggatttaaa ctccgaaatc ctccgactgg caatcgtggg ctaccagtca 540
caaactggag aaacaacctc tcctcgtgcc 570
```

<210> 1052

<211> 445

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI179093

<400> 1052

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taatgttttt agttctgctg catttgtggc acgagatctc attttccttc cttacaggta 180
aggacattgg cagcagcaac attacaattt aaagggtaac aggttacaga tgccttaact 240
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aggaaaatga ggtacttttc catgggggtg cccgttttga gagagcacia agacaaggta 360
acatagttct agttccctca cactcatctg acaagctgct tactgacact caagacagtg 420
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<210> 1053

<211> 467

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI179099

<400> 1053

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gttcacatgg tcttcacttg attctcacct ttgtcctgat ttcttctgag gatagcagtc 180
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atttgctct taagagaaat gaaatgtatt tattgagata atatacttaa tagcccaaatt 360
gaacaaactt actgaaaatt ttaaccataa ccgagtaaga tgtataatag attcaaatgt 420
cttataaata tatattatga tattttgaag tgccttttcc tcgtacc 467
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<210> 1054

<211> 429

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI179100



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 gcatggctcg gaaggacaga aaacgagaac tgaactaaaa tcattgtaat aattctgtat 360  
 aaagcatata tagtacgttg tcttattagt tatcaacaac aacagaaaaga tttaaaaaca 420  
 aagaccacct taattatggg gagaacctca tcatagaaaa atgttcatca tttgtatggg 480  
 attggcagaa acggataagt tttgttgggg atgagggcag ggaagacata taacttgaat 540  
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<210> 1058

<211> 541

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI179236

<400> 1058

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 agcctcttcg gaggcggcct acgtacacac tgagctccag aaggagaagg atcctaacca 180  
 agggccacca ggaagcagca agcaaggcct agttggcaca aagcagatat ccagtggccc 240  
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 gagtcagccc cgaggccatc cctgagtcctg agctggcagc gggatatgaa tttcctgttt 360  
 cctcttctac cacttaggaa gattttttaca cctccgcccc cagctctggg acccaaagga 420  
 agtccctatc acatggccat aggctgcgag gctgtgtcag ggctcggcag gtctatcaga 480  
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<210> 1059

<211> 547

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI179264

<400> 1059

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 tacaactagt tagtgtggtg agttcctggg catcctaaca ggcccgtgag caaaggctgg 120  
 ctctccccta ctctttttta tgtgaatata gacaggagtc cttgggctga ggacacccca 180  
 tatectcaca cctaacctga atacctgccc tgtaagatga tgaagaagg gctgtgggta 240  
 gagagccatc ctccactttc tgtaagattt gcttgcagga gaaggtcgga gcctgagaag 300  
 ggcattctctg aagaaagatc aaggagtggc cagtgcgggg gttgctctgc ttgagccatg 360  
 tggttcaggc aggaaacatt gctggggggc aggaatgtat gttctgagct ctccaactgg 420  
 tttgtgctgc ccattggtag ctctggctgt agggcagaca gcttcggctg atgctgggtc 480  
 tcgctgggca aggcacgaat cttgcggtgc aacacaacat actcagcggg cacactcccc 540  
 ctgcacat 547

<210> 1060

<211> 493

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI179300

<400> 1060

ctagatttaa ttactttatt aaaccgacat ttctgtaatc aacaacaact acttagacag 60

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accactgct gtctgattat gtccataggt caggggtgtt ctgcttacgc atttgggtgcc 120
tcataattaa gttcagctaa cactagggcc tatagtttgc tgtcagtgag accaggtctg 180
gtcttgacag taaagccacc atcaaaagct gcattgagaa cttcatccag gcagctcgct 240
gtgacaaaac ttagatcctg tttgacgttg cttgggatct cctcgaggtc cttttcgttc 300
ctctgcggaa ttatgatatg cttcagtcct gctcgggtgt ctgccaggac tttgtcttta 360
attccaccca ccggaagaac aagtcctctc agtgtaattt cccagtcac ggctacatct 420
gagcgacaaa gccgccact gaagagtgag gcgagacaag ttactatggt aacaccagca 480
cctcgtgccg aat 493

```

```

<210> 1061
<211> 632
<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. AI179381

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<220>
<221> unsure
<222> (1)..(632)
<223> n = a or c or g or t

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<400> 1061
tacaaaataa tttattacag caaacacagc atcacaagac tatgtacaag cacaaagcac 60
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gtcttttaga tactgaatct ctttggcgag agaactctgcc ttctctttca gagcctcgct 180
cttcttttct agctctttac actcgccagt gagggtctcc tgctcagccc tcttcttctg 240
gcggtaccta gtagctgctg tcttggtttg ctccatcttt ttcagcttct tatccaactt 300
ttcagctctt acttttagctg tcacactaac tcagggtggg tcataagggt tgggtcgaga 360
accacgagga acactggag aaggcagact gtctggtggg gccctggagg tgggaagggt 420
gtgttgggga gagccaggt aggactcagg gctcatacag atgccactgt cactatcaga 480
gggagtgtct tcctccttta cacactgaag ggtagagta atataagcag cagagtcagg 540
cttctatctt cttcagaga tatcaacctc acttcncagc tctaaactaa aggaatgatc 600
tggagtggaa gacagaaacc tggggaacaa gg 632

```

```

<210> 1062
<211> 450
<212> DNA
<213> Rattus norvegicus

```

```

<220>
<223> Genbank Accession No. AI179415

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<400> 1062
aagtcgcagg cagggcacgg atggggaagg tctacatctc gttcagggtcc agcaggggtct 60
ggtccagcat cttttgtgta cagagatgct cctcttttgt gcacttcagc ttatcttcca 120
agtcacatcaat ggtcttttcc agtttctgca aagcagtggt aaggcgctcc tgggcgcggg 180
ccagctcctc ttcaaccagc tggatcctgc ggttcaagga ggccacctca gcttcagcct 240
gctcccgggc ccgcctttct cctccactt cccgctggag gcgctcggtc ctctcctccg 300
catcatcagc ctgctgctgc agaacctgga tcttgcgctt taccgctcag atggtggtgc 360
tcccgcccat ggtgcctacc cagctgcttc tggaaatcag gttcctacct cctccgctcg 420
gcgttgtagc cgcttttcac cctacttccg 450

```

```

<210> 1063
<211> 490
<212> DNA
<213> Rattus norvegicus

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<220>  
<223> Genbank Accession No. AI179498

<220>  
<221> unsure  
<222> (1)..(490)  
<223> n = a or c or g or t

<400> 1063  
ggccaaagcc atcctcatcc agatttatatt cctttatgat cattaagact gtcacttaaa 60  
caagtagtca aaaatacata aactctgatt ttatagactc taaaacatta aggtacaaaa 120  
agtaagtaac atctacaatt agcagaacat ttatgacata taatttcatt tataggaaaa 180  
caggtagaga ggactacaaa taaattataa cctgaagaca tactataacc tgaagacata 240  
catataaaaa aagccttggg ttattttatta gaatctccca gaaagggtgaa tgatgctagg 300  
acactatcaa caatgtgagc acaatctgac agcattttct tccacttcta ggctgtgcta 360  
ctagcttaag aggcactgga cacagccagc ttcttcaaatt gatccatgaa cacctgcagg 420  
ctgacatcgt ctgtcaggat gggcgctcca gtttcctgtn cccaagcata caggttattg 480  
tgtgtctgag 490

<210> 1064  
<211> 368  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI179519

<400> 1064  
aaaccctca atttttagcag cttttaattt tttaagaaac tgaacctata tcctgtaattg 60  
ttaagatatt ttatatatag ttttcagcag gataaaaaaa cgtaagacta tttgaaggca 120  
agaacattta ctctctcat tctgtgtaag gagagcaatg cagcagggtgc gtgacaaaaa 180  
tattatagac tagatatggt ccaaagtcatt tccgtttgct tgtttaattga tgttcaaatt 240  
tcattggcca gttcttccgt ttctgcagaa ctatctccgt taactgtgat cttcatatcc 300  
tcttcatatc caggaggcat gaaagccaga gcataaggga aaagcttatg acaactcacc 360  
ctcgtgcc 368

<210> 1065  
<211> 322  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI179539

<400> 1065  
gaattgaaca ccaaaatttt attaaaaacc agtctcacat ttcaaattgtt atcttacaag 60  
tgaacagcgg ccagggtgata taaataagga ggaggaggag gaggtcactt ctggagaaat 120  
caaattcctc aggacagcag tgacacaaga gcatccagga acttgctccg gtcctcagct 180  
ttcagctcaa ttactgagag gtcaaagtag ttgtgtagag tccgggagct ggtgctttct 240  
gctgccttct caaatgccg accaaaaaag ttctttctat ccgagctatc agtctctgga 300  
gggatgccca ccacagtcac tg 322

<210> 1066  
<211> 564  
<212> DNA  
<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI179570

<400> 1066

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ttgaaaaaag gttattttta atggatacaa agttgaagtg tgaaatgttt tcaaaatata 60
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aaggggatta gaattgtggc tgcaagacct cacatgtaca ctgccatcct tagatgtcag 180
ctggtcctaa gtggcaccct taactcacia atgggactca cactgaatgc ttgggaattc 240
cttccttttt gttgggtttt gtttttaaat ctttctccaa caaaactaat atcaaaataa 300
gccaaacaaa ggaccgcacg ggtccacttt aaagtcaactg acacttttcc tcgtagggac 360
ttcacacagt gaacttcctt gactgctcac agtgatgcga cgtgaagagg caaagtgagc 420
aaatgcatac cttttgtaat tgataacatc tcttaagctt cactttattc gtcctattga 480
tttttggcct gaattaaatg taaatccctg cctcatcatc aatcaggcac ttccctcctg 540
agcatatgga aacacacagc tagc 564

```

<210> 1067

<211> 613

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI179610

<400> 1067

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attagataat gccattttatt atttcacaca gaagttagag accaagggtta caattattaa 60
ataccaccca cccctcaaaa gacagcccta cttgggttaga ataaaaaac aatcgatata 120
acaaaaaata ccattacact ggtagaactg gggaaataac aaaaacaaga cagaaacaca 180
agacagaaaa tctctgcaca ctgatataca agtggccatg acgctggggg aaagcagtca 240
tggtcagtca acatggacgc cgactaccaa gggcactggg ctcagaacag ccgcctctac 300
cgaccacagt tctggggctc tgttcagga tttggggctg ctggtttcca agttcaggcc 360
cctggctgtg cttttgggtga gggaaatgtg ccaggcatct ccttccattc cagagagaca 420
aaggaagaca caggaagggg gcgaggaacc ccaaaagctt tcttagaggc ccaagaaaag 480
agagccaggc aagattctcc cctgcagaga gaaggctaca tgagacagag ttcacagcct 540
ctggggggcca aactgcatt tacatggcat aaattccac tgccacgggc gccaacagga 600
aactgagtgt tga 613

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<210> 1068

<211> 531

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI179709

<220>

<221> unsure

<222> (1)..(531)

<223> n = a or c or g or t

<400> 1068

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tcagacatgc ttaaatatat acaaaacgac agtctctaata cccttgagga gaaggcggaa 120
cttcagtgtt cctcatcggt tcaggcacct cgccttggtg caagcatttc caggcggcct 180
ttgagtgtca gttctgcagc actgcttctg cagcgcagcc cctgccggct ggctcgcggg 240
gacaggctat agcccgcggc tgtcagcagc acagtcctcg ctccagtggg catctcgctt 300
ctctgccacg agtttgatga actgtgagtg actggcatac agcttgagct ggctcgctgat 360
gtccacccac ttcaccttcc ccgcatcatc tccagcctcc agcgtgaggt tgtccatcgt 420
ctcncctgtc tcatcatggg agttcactgc ctcagtctcc atccatgcgt tgtcagtgtt 480
ccgaggggtcg tcgacatagc ccttatatat cagagatgc tcctggctga a 531

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<210> 1069  
 <211> 444  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI179750

<400> 1069  
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 cacgaatggt ccatgacttg aattttctga aggggtgaca ggccatattt ttggatcacc 180  
 tgccactgct ggctgatctg catctctgtt ggtttggctt ttgttggttg gtttattttt 240  
 gagacagggt cttatttatg tagtccattc ctgtttcaaa cttcctgtat tgctcagggc 300  
 aaccttggtat tcttgatcct cctgcctcta cctctcaagt gctgggataa catgcttaaa 360  
 ctggcccagc tgaataacat cttttgttta aatcctgtca gccacctgga agatagatac 420  
 cttattagtc ccatttgcag atga 444

<210> 1070  
 <211> 577  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI179857

<400> 1070  
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 atcctaaaaa tgacagggtg ggacgctcct caggaagggg cgagcgtggc tggcagctcc 180  
 tgtgctcag ttactcagaa gcagtctgtt tgcagtctct acatcccatg attttgaaga 240  
 ccaggggccc tattactgcy ttcctatcaa aacccatagc acagagggtt tctatttttt 300  
 tgggtgtattc tggactagac actggtgctc cagcatacac gtgtgcccac agtcgagctg 360  
 tctgcttgaa catttcagga ttttgtttgt actgatttgc tactactgca tcttgggggt 420  
 catctgggtc tgcagcggcc agcagtgtct gcaatgacaa taatactgtg cgcagagtca 480  
 ttgctgctgc ccattgatct ttcaggatat ccaaacaat agcccctgtg acggaactaa 540  
 tattaggggtg ccatatttta gtgataaacc ggacctt 577

<210> 1071  
 <211> 458  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI179870

<400> 1071  
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 aaaagtgcac aaaagccac agttcaacag tgcaagccac tggcacaacc caacccggag 120  
 ggagagtcag tgcccagtag caaaaaccga ttcattttta attaaaaatt tcaaagttta 180  
 tataagttta gctgtaaatc tattatcaaa aagttttaag catgtaagtt gcctctaaat 240  
 gacagggttt taaactgcaa atctgccccg agtgggttaac ttataaactg gggccctttt 300  
 aaattttaca tattttaaat atccaagaag cagctgattt caagtctgt tcaaccttcc 360  
 ttttctgctt ctgctctggc tgaaaactga gaaggaacct gagctttagg tagctggaaa 420  
 attcctcccg ggtgtggctt tatgtgaaca tttaaagg 458

<210> 1072

<211> 568  
<212> DNA  
<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI179953

<400> 1072

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gatcattaaa gtttgggtatt ctattaaaaa ccttatttaa ttttaaagta tacaaaataa 60
tcatatttta ataatgaca tttaggagtt tacaaaatta tatcagtgac aagcatgaaa 120
ccacaactct tatttattgt tacagaatgg cttcccaacg acattcttgg caggaagaag 180
tgtcccctgt tggatttgtt gactgtcatc ttgtggacaa cacatcaggc agaatgacaa 240
tgctaagggt caacttgtcc tagaaaagtt acacattgac ctaaactagt ttcttctatt 300
ttttccaaat atcaacattt ctgtttccag tttagaaggc aatgctgaaa agggaggcaa 360
acagacattc aaagtagaaa aactcagttt taatcaacag gatttagagt ctagaagttt 420
catcggttct ttgaaaacca ccccatcttg tttctgcacc attaaattgt accatggcag 480
tgaaattccc aagcaaacct atgaagtctt ttgatactga ctgccacatc ccacagctac 540
agagtagacg agctgggggt ggagggggg 568
```

<210> 1073

<211> 597

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI179979

<400> 1073

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aaatgatcaa agagatcctt tatttaatgt agacagccta gtaagtcac aaataaattt 60
ataatagtta gatgcctctt aaatatacat gttatcttct gaagctaaaa gtaatatgca 120
ctcaaccagt ttttaaaatc tatttggaac attaaacatg ataaaagtag aaaaaaaatc 180
tcttatgaag tcctctacga aaggaaattg tgacaagttc ctgttaagac agaaaccatt 240
ccatctccaa gggagaacaa gagaaacatg aatatgaaca gaaacaccta cttcctgggt 300
ttatcctagg tagaccaact ctttacagtt attttctgtc ttccctggat aaataagaat 360
cccttaacag cagcccgga attaaccaat tccagtgaag accctgagat ggctgccctg 420
cagcaggttc ttgccttttg cagtcaacaa catcttttac aaagcacctt gacttatggc 480
aggcgtgaca aaaccagggt aattagttgt cccagccag ggcccgcca cctttagcct 540
tctaggcgcc actgttggga aaaggagcca tcacagatcg ccatgccgac gtagccc 597
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<210> 1074

<211> 667

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI179988

<400> 1074

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gaagagaaaa tctctaataa tttattgacc ttcagtttca catcgtgaaa aaaaataaca 60
gttttacaaa acctcaaaaa tgtagtggaa gcaaacaaca tacgaacacg accgtcttct 120
aacttctaca gggtttggtt tgtgaaccac atattcaata gccaaagagag ggatattatg 180
cggctctaata cactcttatt cagacagggt tcaagcctga gaaaagaggc tccaccatta 240
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tgcttcaaag tgtgggacat ttcacagggt gagaatggc aagtagcagg cccgaatgcc 420
tagatcaatt gaatgagcgg ggagctaga aagttccct gccggctggg ggcccacct 480
tgctgggcag ctccctctgg ctcacacagt aattaacaga ggattcaagg ccgggcaca 540
actttgaaac agctgcagag aattctccct gctctcagca gcagtgcagt gaagatcttg 600
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agacagattt gcattgtaaa ctgtggagct gagacagcta cgagacaact gatcatacca 660  
ccagggt 667

<210> 1075

<211> 597

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI179991

<400> 1075

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gccttttaat ttaattttat tcctaaagtt gaaattacta gcaggtagca ctaaaaatac 60
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acacttctaa gataagaagc tagatgcagc ccttgctatt aaaagctgta cccaaacaaa 180
aatggacggt tagtctaagg cccgggcagt ggactataga atgtcagttg tctcccaatt 240
atgttttaaat gcagaaatag caataatgtt gaaacgtaca ttcattaagt attagcattt 300
agaatataca tggctaatta ggtgaacatt ccgagcagct acggctcagg agagcccaca 360
ctagcccagt cacgaacagt gagctcagtt cagagaacaa aagtgtcaaa cacaggataa 420
aggtaaagta agagacaggc gagtggcctg cacacccaca ctgaacagtc tggcttcacc 480
tagtgctcag gggagacaag tgacagaact cagcagaacc tgtgaagcca tgtgtccacg 540
gttgacgggc ctatggcaca gcccagggtt ctaagactta ggatgaacct ttgtgcc 597
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<210> 1076

<211> 528

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI180040

<400> 1076

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acattttaag attataaaaa ttggtttatt gtaaaagaaa ttcaagaata accagttaaa 60
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gaagactacg ttgaggctgt gattcaaat cagtgcagaga aaagggtgctc gggctctcca 180
cagtcagcac ggaggggttg ataaagtacg aggcactgtc aggcaccagg gctgctggac 240
attgaggtat aaccaggcac accatgctga gggagaagga aggtgacaca tttcactttg 300
tgagggaggt taagcagctg gaaagttagg aaaaacttta ctgggagcaa gatgagagcg 360
aagtctttta ggaagagaaa ttaagttcat aaaagctttt ctaacagtaa cagggctctg 420
ctacctttta ccagcccctg cccacctgcc ctccccctcc ccacactgag gctactctgc 480
ccacagaaga tgtggtcctt tgttctggag tttcctggag aaatatgg 528
```

<210> 1077

<211> 600

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI180187

<400> 1077

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tggttaacaa tgacttgaac tgatcaccag taaaaccctg ggctgacatg gggcctctgt 180
ccttctcccc cttttaaaga gcatgacccc atttctaatt caaacatttt gcagtgaaga 240
atcacgagct ttcttgaatg aagaaaaacca accagaatta accaaatttc caacatgccg 300
tgtggcttct tctcaaattt agcatttgca ggtatgagaa accaaagcaa acagagttca 360
cattccccct ggccttctcc aacttctac ataccctcag gtcaggctgc tcctagctcc 420
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aatgaaagcg tacagactgg aggataaggc tagtgctgtc ttgagggacc aggacccaag 360  
 ctctccctca gctgtagact agtttgggtga agctgggtgc agcgaatgac atggatgtaa 420  
 tcgcatagac cagccactgc ctggggccagc aactacaggt cccaagacag gcctgaggac 480  
 ctcagctccc ga 492

<210> 1081

<211> 646

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI180442

<400> 1081

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 tccgcttgta gatcttggtt gctagttcca ggaagatgga tgggggcagg ggcgcgagc 120  
 actgctctat gagactcttg aggcggttgt aactgtcttc ctcgtacttg aagaacacac 180  
 tccgcagatc cagctcctcg tacagtgtct tcacccgcgc cactttttct gggtccttct 240  
 gcccataatt ctctctaaag atctggcgct gctgaggagt ggctcgtagc agacactgaa 300  
 ccaccagcca gctgcatttg ttgtcctgga tgtcagtgcc gacctttccg gtcacactgg 360  
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 ggatcttcag ggcattagcg tgttccttct ccccatcaat tccagccatg tacatggcag 480  
 ccgcgatagg caggtagaaa gagtagaaaag ctgtcttgta cttgacgata gatttggtacc 540  
 tcttttcagt gtatctacca agatccactt ggccctgggg tgctgtgatg aggtcgagag 600  
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<210> 1082

<211> 458

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI227562

<400> 1082

caagggaaca agtccgtggt tgtcagagcc ccccccccc ccccccccc cccccccagc 60  
 ccaaaccaca gaagtcgact agcccctgaa acacccacaga ggtatcaccc tcagcataac 120  
 gggcacgaag tcgcgacccg agttgtaaac cctagagtac cggttacaga atagattcgg 180  
 ctggcccgcg gctatcgagc tccggcccag gtggttgagg accgtgctgg cccccaattt 240  
 cagcgaaggg atggtctacg agcgtaggat gctcctggac gagaccagca catgaaccgg 300  
 aagcctcacc ggcaagatca tttgaccact aatcctcaac agatgaagtc tattcggccc 360  
 caggctaccg gccgggacca cgcaggagct aaagtacagg ctctacagc tagcacacct 420  
 acagtcctag cactaccggg gcttcacagc ccccatc 458

<210> 1083

<211> 600

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI227699

<400> 1083

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 atactaaaat tttgacaata ggatgttgct tataactttc tttaaattgt tgttccaagg 180  
 aactgtttta gtacatcttc cctaatagtc acagaaaaca aaaattcaac ttttaaacat 240  
 gtctactttt gagtaaaatt tctgcacggt ttaaaccacac acggattctg tgttcaaaag 300

aacagcctag ctatctgtta tacaggttcc aacaaagaac taagggtcaa agcaaccctt 360  
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gctttgcaca gtcttgcaat gtacctcaca ctttccctca ctgtgccctg tggcttgctc 480  
tattgaaaca caacaatgca tgcttcttca gtgttctcac ttgttaaacc acttctgagg 540  
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<212> DNA  
<213> Rattus norvegicus

<220>  
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gagaggcttt cacatgcact gcattgagga tagaactctg tctccaaagg cttccatcac 300  
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ctcattcatg ccagagattt cagtcagcaa attgttctgt atccatttct aggggattag 480  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI228042

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gtagttttca tggattttct gccggatgtc acacacaaag gccaaagggt tatccaggac 180  
ttcatctctg ttctgctcaa agtagttctg gaggatgggt atcttctcct ggggtctcct 240  
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atatttgaag gtcttgggga gggagtcagc tgaccgggag aagcaagacc tcttcagcag 360  
accttgagggt ttcttatttc tccttggggt caaccagtca cagagaaatg aagtcctgtg 420  
cttgaggaggaa ggagagggaa agcaggagca gcagcagcca ggaagtgtt 469

<210> 1086  
<211> 482  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI228197

<400> 1086  
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cagcagaagc ctgaagaatc cgcagctctt ccatccgcaa agcttccacc aaacagagct 180  
gacttatcag cgatcctttc ctttcccttca tgtcagaaac cttgcgcagc tcggagttaa 240

tctccgcaat gaaatcagag catattttct gggccacgcc caagcttgcc ttctcattcc 300  
 tatcgggagat tacgtcacca atgagcacct ttttcagga cgtaaacggg tcggctttca 360  
 gacacaacaa cttgagagct gtgagcattc tccaagatgg tccatcccat ccaaacgtca 420  
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<210> 1087  
 <211> 567  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI228265

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 acagcacgca gtaaataaat ccctcccaca tttgtacaa actacatgat tttgatatac 180  
 aaagattctg tttttattcc actgacaatg tacaaccaac actatttaca atgcaagggg 240  
 aaaaaaaatc aaaaaacaaa aacacgttta taaaccacaa ttaaacattc tgctactggc 300  
 agccactata gtttaggagg tagctttaat taaacaaaat gaacagaagc cacatttccc 360  
 aactcgtgtt ctaaaaataa tttacacaag ataaaaatta atcatatgca cagtatgtac 420  
 agtttaataca aactgcaatc tagcttaagt ttctgtttaa agtagaacta agatggcagt 480  
 gggtttgcta ctgactgaac acagtctgaa gtcttcttac agaaacacat caaaagccta 540  
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<210> 1088  
 <211> 461  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI228291

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 agcatcccca gtgaggata aaaaggaagt atccaatact gagtcaaatt catacgatgt 180  
 tattggttga ggcacagcac taggaccaac tgactaaacc agaactgaag gaccgggacc 240  
 gggctcaggg ggtaaccagc agactccac attactccga gaactagcct aggatctacc 300  
 aagaaaggac tgggagcagg gttccgtggt ggcacttagc ttatacaagg ccttgggttc 360  
 cgtccacaac accacaagga aaacaaacaa gcaagctact tgttggtatt gaattcactg 420  
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<210> 1089  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI228540

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 gtgaagggta aagaaaatgg gccagtggtt tgttccatat gaacgggtgag gaggtgcttg 180  
 ccaacactcg gacaggtcct gaggggaaat gaagttcatc agctccctca cttccaacag 240  
 tgaggcagag aagaacacag agatacccga ccacttctt ccagtggctt caacgtagtc 300

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 gggatcatatc cttctgtgag tgtcgaagta gttccatgaa gccctttcct tgtgacttgg 420  
 tcacgggtcca tagaaaatgt gacttgcata tagtggttgg cttcatatatt ctgtagtccc 480  
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<210> 1090

<211> 600

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI228557

<400> 1090

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 atcactcaaaa tgtatccaga gtatacttga atttcataca cagcttgaca aggtgggtct 180  
 gacaggtctt ccattagtca atgaatggaa atggatcttt cgtgaaaggc atagaaaaata 240  
 atctagacta aactgaagg aatttgggta actctgaatt tctttacatt acaaagaaga 300  
 gaacaaatgt gcccaaaagt aaacaggcgt ggatgtagtt tacgggttctc catacactta 360  
 catatgcaca aacgtcagca gggagactct aaggaaccag caacttctaa ctcaagttag 420  
 caactacgca ccagcaaagc ttatggaaag actcaatggt gtagatgagt taaaaagggg 480  
 aaggagctgg ggaatgctat tcagcttgct gaaacaaggg cacgcacaca ccgtaaatga 540  
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<210> 1091

<211> 611

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI228596

<400> 1091

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 cctgcgtgtg ctgcagacat gggacacaaa aggttggatg caatcagcaa agagtgcata 180  
 gcacctggga ggaagtttca aatgtctaga aaagttagtc agagctctgg accactcacc 240  
 aaataaaaaca aaaagcaaaa acaaaacaaa caaaaacccc actcagtaca tctggcaaac 300  
 aacttcccaa caacttgaa ctatctcctg cgaccataa gaacaattta aaatacccaa 360  
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 cgaataccct aaactgtatg acatgcctaa taacaataag ttacaaatat tcaacctaat 480  
 aacttagaca tgatatggtt aatataacag acattgtatc tcagctaacc tttcatgtaa 540  
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<210> 1092

<211> 592

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI228624

<400> 1092

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accatgtggg ggcaccaaga catgaacctt ctgtcctcta gaagaacagc taacggaaat 180
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aaaaagtttt gcaagggtcat gccagagctt aaaattttga cgcttttcctt tgcaaagtctg 300
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ctgcacactc ctttgcaact ggacctgtga tagcagaacc tttcatctcg cttttattgt 480
ttactatgac ccctgcatta tcttcaaaat aaaggaacac cccgtctttt cttcgatatg 540
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<210> 1093

<211> 586

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI228630

<400> 1093

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cctgcgagagc ttctgagacc cacacatcag accagtctct tcaattcaaa ggccaagtat 180
gagagcagac acagttccta ccccagaggg tgctgaggaa acacgtccct gccaccctg 240
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<210> 1094

<211> 509

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI228676

<400> 1094

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cactacacgt ctaaaagagg atcttcagta tgccagtgc accaggacac atccctggca 180
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gaaaaatcct cttttgctg aaggagtagc gttctgcctc ttgctacaga ctctgctctg 420
tctagcagga gacagccaag ctcatagcag gcatatggct ggacgtatga gttattctga 480
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<210> 1095

<211> 525

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI228723

<400> 1095

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tcttttaaatc ggcattgaggt tacttttact ctccactgga atgactaggg cccagttac 180  
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gcagcaatca agaccctttt cccctccttg atctggggga caatttcttc attccagaag 420  
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<210> 1096

<211> 487

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI228728

<400> 1096

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gcaataacca taccagcaga aagcaaacat ctgcgaattc aaatcaagca ttttgaggga 180  
caacagtggg tctgcctctc ctttccactc ccacagtgcc tcctgaggca gccatcctcc 240  
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gcttgctggg cagattccgt ttgctgcctc cagcctctca ttcccgcctt aattgtaggg 420  
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<210> 1097

<211> 550

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI228729

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aagctgttga aaaaaaatct tcaaatgtac aaaactgttt tttttcttga taattaaaaa 240  
atacataaca atttaaaactg aaaacacatt aagtttagtg tgcatactta ctatacaatt 300  
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tagataaact ataataccat agttcacatg aagcccttta aaacattcat gtcatagact 480  
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<210> 1098

<211> 511

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI228931

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gtgccacgtg cagttcgggt ccaatagttt acctcgagtc tcaaagagcg gcaggctgaa 480  
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<210> 1099

<211> 570

<212> DNA

<213> Rattus norvegicus

<220>

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gcaaccacat tttggtctca tttacagata cccaacattt cagttgggtca atgaattcta 300  
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<210> 1100

<211> 531

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI229035

<400> 1100

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taatccctcc atttcttcac atgccccatg ccactctgct agtgagtttg acttggtgtc 480  
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<210> 1101

<211> 430

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI229167

<400> 1101

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 tcccccttaca agaagttaat ggctcagaat agaccctcct acagaattta ccatcactaa 180  
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 aagctaaaaa tagatattta ataatttcc attttttatt ggaaaactct ttaaattaca 360  
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<210> 1102

<211> 319

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI229172

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 caggcaactg tgccctctac catcgggggg gctggtggtt ccatgcctgc gccactcca 240  
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<210> 1103

<211> 467

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI229178

<400> 1103

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 gttatcaaaa ctcacggaga gggagcaagg cgaatgtgac ggggtgtgaa ctcaggcata 420  
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<210> 1104

<211> 386

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI229192

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<210> 1105  
 <211> 457  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI229235

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<220>  
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<212> DNA

<213> Rattus norvegicus

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ggggagttaa caccaatac cacattttct aagacgttcc tcaaggcatt ggtgattgta 180
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caaagaataa tgttcttcca ct 502
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 aaaatgtgca tgtttcagtt tacactatac aaaaatagtt aaaatacatt ccaggtaaac 360  
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550

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<212> DNA

<213> *Rattus norvegicus*

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cactgggcca tgaacatgca gtgtctgtcc cctaactctc aagtaagggt gaggcagcga 480
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<212> DNA

<213> *Rattus norvegicus*

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tacaactaca gtttaaggca ttatcagcat attttaaaat caagaaatag acaaaagtgc 360  
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cccaaagtgt ttttaggcag tgattaaaat caaaataatg catcttaata aatctcagct 360  
gttaaaagaa caaacctagc aatatagaat acttttctac acagtatttt taactactca 420  
gttcaggagt tatttttttt ttctttttta aaaaccattt tcagttgagt gctactacat 480  
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cccaca 546

<210> 1120

Figure 1 consists of 12 subplots (a-l) showing the time course of various parameters during the first 24 hours of a 28-day study. The parameters are: (a) Rectal temperature, (b) Heart rate, (c) Oxygen consumption, (d) Energy expenditure, (e) Food intake, (f) Water intake, (g) Urine output, (h) Urine osmolality, (i) Urine pH, (j) Urine creatinine, (k) Urine urea, and (l) Urine protein. Each graph plots the parameter value against time (0 to 24 hours). The data points are represented by open circles, and the lines represent the mean values. Error bars represent the standard error of the mean (SEM). The parameters are: (a) Rectal temperature (°C), (b) Heart rate (b/min), (c) Oxygen consumption (ml/min), (d) Energy expenditure (kcal/min), (e) Food intake (g), (f) Water intake (ml), (g) Urine output (ml), (h) Urine osmolality (mOsm/kg), (i) Urine pH, (j) Urine creatinine (mg/dl), (k) Urine urea (mg/dl), and (l) Urine protein (mg/dl).

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<221> unsure
<222> (1) .. (450)
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<213> Rattus norvegicus

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<220>  
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 ctgttctctg agaaagcctg aatgggtccaa tccctgctg caggaatgca agatatgcag 540  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI230326

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 tgtagtagcc tagagggcca gggccgtgat atgtacaggg gtgttctgtg tacccttggg 240  
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<220>  
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 <212> DNA  
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<220>  
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496

<210> 1132

<211> 663

<212> DNA

<213> Rattus norvegicus

<220>

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aaatacgcag agaacaacaa ctagcagaaa ggacaggagac atacaggctg caggaagatg 240
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<213> Rattus norvegicus

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<223> n = a or c or g or t

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<210> 1134

<211> 651

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI230577

<400> 1134



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gaaccgttgg gctggggagg ggtggagcag ctgagataa ctggaaccca gagtgcacgc 600
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<210> 1138

<211> 667

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI230759

<400> 1138

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gcctgaataa cactaagctg taaagaaagc aaggctcagac ctgcttacac caggccagac 540
acaaaatgcc ggaagctcaa ggtggagtg caaacacaa ccaagggcac tgcccaggag 600
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<210> 1139

<211> 463

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI230951

<400> 1139

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<210> 1140

<211> 296

<212> DNA

<213> *Rattus norvegicus*

Figure 1 displays 12 scatter plots showing the relationship between the number of children and the number of children in the household for various countries. The plots are arranged in a 6x2 grid. The left column shows the relationship for the total number of children, and the right column shows the relationship for the number of children in the household. The countries are: 1. United States, 2. Canada, 3. United Kingdom, 4. France, 5. Germany, 6. Italy, 7. Japan, 8. South Korea, 9. Taiwan, 10. Hong Kong, 11. Singapore, 12. Australia. Each plot has 'Number of children' on the x-axis and 'Number of children in the household' on the y-axis. The plots show a positive correlation between the two variables, with the slope of the relationship varying by country.

<210> 1143  
 <211> 527  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 gaaaaaacia tctttatgcc tgattttaaa aagttgaaaa gaggtggatt tttcctttat 180  
 ggtgctgaaa ggaaggatgg agaatgagga gaaaataaaa ctgtgaggat caagactggc 240  
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 <212> DNA  
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<220>  
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 ctgtcagggg gagccttaac cactgataag ggctcaggac cgaggaaatc cagcgttttc 180  
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<210> 1145  
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 <212> DNA  
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<220>  
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 cagaacccac agacacacag ccatgttcac agcctgacat ccaagctccc acacacccga 180  
 cctctgaggg cgggaggaag gtgctgactc agatgcctgg gagaacacat gaacttgtaa 240  
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 cagagtaaa aactgctcag tcgtatagaa aaggcattca gctgtcacat gtgtttatat 360  
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 agtacacatc tggcagaagc cacctgagac cattcaccgg tctctctctg taatgctgca 540  
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 agcaaacacc ccaaaagc 618

<210> 1146  
 <211> 461



<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231127

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gatgccattt ctccagcggg acaagagctt tacaggatgg tgccagggct ttcctggacg 240  
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acgaccgcca gatctgtgtg ttcagtgggt gaacaaccgt gtttggaggg atcgaaagct 420  
aaaactgacc tctctccctt taacatccca acccatccaa g 461

<210> 1147  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231140

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tctccgtcag gccgtatcag agtattgact ttggccacat ctatatcata gagttttttt 180  
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ccgcagggtc ttgggcccgc gaaagcgaag aaggaagctc ctgcccctcc caaagccgaa 420  
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<210> 1148  
<211> 528  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231159

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<211> 574  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231193

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aggcgccaga acctctgggg tccctcttcc ttccttctcc ccagatcttg cagaaacacc 180  
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gatgccgcag cgggtggggcc agagccaggc ccattcccaga ctccaactcc atctccagct 300  
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<210> 1150  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231196

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<210> 1151  
<211> 584  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231226

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<210> 1152  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231309

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<210> 1153  
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<213> Rattus norvegicus

<220>  
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gaatacacgg caggggagtg gcacttgga cagtctctgg acaccatagt cactgaggaa 180  
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gagccctagt tagctacca tgcttggcac tccataaagc gcagtggcgg aggaagaaca 420  
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<210> 1154  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231388

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ggaagaaggt acaagagaag cgggggtggga gtggggagct ccgggacatc agggatcagg 180  
ccctaaaaca caaacaacac agcaaggga gtgcaagggt caccacaaaga tacagaaaca 240  
atctcaaccc cgccacttag ttctgattgt ccttgttgcc ccgccttgat tttcagaagc 300  
cggaaattct aatttaattg gaagcctctc gattcttaga gggcaactcg attttcttgg 360  
aaacattaaa tgaactaaaa tgtagcagcg agcccgagc ctttctgcgc tctgcggtag 420  
acgtggtgtt acactgccac tctcca 446

<210> 1155

<211> 534  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI231439

<400> 1155  
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 ccaaggcccc ccgcggctct ctgtattgtc ccttggaagg gttcctgcga ggtccctcct 180  
 gagaaaagga cattctgagt taggggcaag attgcctcag ggatagtcgc catgcggtcc 240  
 cttggccagc cactccaag tgtccgtttg ctgctgcgga gcccgagct gctcagcact 300  
 cgggtgccgc caccgctttc tattggaacg ggtcttcagt cctgcagcta gctgagagtc 360  
 cccgctgccg ccgtccggtta cactcagtac actcgggtaca ctgggtacac tctggagcag 420  
 ctgcccacgg agacggtcgc ccgaggaact gcgtgaggcg catggcgctt tctctctacc 480  
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<210> 1156  
 <211> 526  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI231448

<400> 1156  
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 ggggtgcacag agggggcgga cagcagctcc agaccagctt ctcccaaaag cctcgtggtc 180  
 caagtccggt ggtacgcact ctgggcaggg aggggcagga ccatgcagt cataggcgag 240  
 aagggacacg aagtcaggag ggccgaggct gggcttaatc tattttgggtg tcgcgctgca 300  
 gcttgatgaa gccgatcagt ccattagtgg aggagtcag ggaggttacg gcagagctgc 360  
 cgtccagctc tggctcaatt ttcttgcca gctgcttccc cagctccact cccactgggt 420  
 cgaagctgtt gatgtcccag atgatgccct gaacgaagat cttgtgtctca tacatggcaa 480  
 tcagtgtctc cagaatgaag ggtgttagct tggtaaacac aattga 526

<210> 1157  
 <211> 446  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI231506

<400> 1157  
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 gcttttggtc tctccatttg cacaagggtca agctcattta cccacagga caaagagatt 240  
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 cccaaggcag ggcaagagct cctgtgacct gggaggagga aagacaaggc agtacttcc 360  
 ccaccctgac agtcccaca ctactgccag ggcctgggtc cgaggggtcc tgacagtcct 420  
 ggatcccggg gcaaaacagt gcttac 446

<210> 1158  
 <211> 542  
 <212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI231547

<400> 1158

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cagccacttc tgtcttgccc ttatgttccct cctcagccag cctctcaaac atgttggcat 240
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tgctgtccag ctccaaggcc ttgttacagc ttctgatggc agctgagaag gcctgcagtt 480
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tt 542
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<210> 1159

<211> 689

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI231763

<400> 1159

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aattccttca ccattctcctt caccggtctc ttgttcactc gctcacgaag tatctgctgg 180
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gcctccttga tccacatgct taggaggctg aagcagtgtt tgttcagggc gaacaggatg 300
tcagcaaaac agtccatgag gctacgggag gcctggcccc cgatggcctc cagcactgct 360
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aaatctggct tccgcttcaa agcctgtgcc aggagtgtga taaatgaatc aacaatatca 600
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<210> 1160

<211> 664

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI231792

<400> 1160

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taaatcaccg tacccatgca cagaaagggc tccaaacaaa gcagaggggt tagacttctg 300
gaacgggcaa cttgtttatt tatacgggta agaataggga agagaagccc ccttggttag 360
cgctttgcct ccacccaag ttactgcata ccaagcggct atgaataaag acaaccagct 420
gactgcaagt ccgcagtgct atgcatctta aaaagtctct acaacgcgga ccctagggag 480
ccaccgggtt gccagccgag tctgctgtgc tgcctggggt tggaggcgtg gcggccttgg 540
cttctagctg ttggctttca gtttgtggat cttcgttttc aggaccttc ttatccttgt 600
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cggtctgccac ggggcccattg atttcctgca gtggctgctc gggctcaagg ttgctgggct 660  
ggaa 664

<210> 1161  
<211> 410  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231797

<400> 1161  
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tctgtctgctc aaaacttttc cggaaaggct tccatttctt ctttaatcct gttttctacg 120  
agtaacgtga agttactgtc tgtattggag aggttgtagc tgacaaacac ctgtttgctg 180  
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agtggacgag ctgctccac agcctcgcac tgaagttgtg aagcgacacg tccgcggcgg 360  
cttgcggtc ctccatccc cagccaccg ggccacagcc tcctcgtgcc 410

<210> 1162  
<211> 651  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231798

<400> 1162  
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caaaggggag attctgacac agtcaaagac acttgccat caaatgactc acaggacctc 180  
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ctggtatccc cgtttttctg tgcctcagcg aggatcatgg cccgcagcag aggtgggtag 360  
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tgcttgggta ccaaccgcca atcgtggtac atgacttgct cgatttccc agccgtttcc 480  
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gtgtagtcag gcctcacacg cgtgaggcgc cagtagcatg gctcgtcgtg ctgccacagc 600  
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<210> 1163  
<211> 652  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231800

<400> 1163  
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aatataaaca aaacataagc aaactggcac tgtgtggtgg tgaacacctt caagcccagc 180  
acttgggcaa aagggacagg aggactgctg catggttagat gcaacctgga ttacacagca 240  
agaccctctc cccacccaaa agcaaagcaa aactggacct aagactcaga aaggtaaagc 300  
agtggattta ctgctgtagg aggctgagca tctgcatggt ccttatgttc cagaaatcct 360  
tggaaccgag gcgctagcac tttaaacagc tttgggatca agtccttctc agtgagccag 420  
aagtcagcca tacgcatggc tcgttcgttg gtgtctccca gctttccata gtcgatgagc 480

ttctccggt agccctcat ctctccacg cgtgccatg tcgctcgat gcgttcgtgg 540  
cgaactaggc ctgtgagcaa gttccgtaga aggtggatcc gggactcggg accgaggccc 600  
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<210> 1164  
<211> 712  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231801

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atttgaatat aaactttttt ctagaaaata tatgcacata ggtatttctt agaccatgtg 180  
tagccactc ttctcttggg aatcttcata aaagcgctc agtgactccg ggattctggg 240  
tgtcacaatg ctcaaggctt gaggtaaag cctcttcata atgcagtcag ctttaagtgt 300  
ttcttccaga gctaggagag cggcctcctt gcagactgct atgatctctg ctctgagta 360  
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gaactgcaag ttcagtatct ccttcttctg tgctgcatcc ggtaagggca cataaatgat 480  
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tgccaaaaat gtcacatttt ttagctgttc aattccatcc atttccgtta acagctgagc 600  
caaaacacga tctgcaacat tcccggcacc tgaagaactg cccctttcaa cagccaaggc 660  
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<210> 1165  
<211> 591  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231805

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accaataaac acgaaaaacc attttcgact atgtgctacc ttcgcttgct tatgcaggat 180  
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gaggctccag tggctgccgc gtttataaaa aacgccaag gaatgagttc cttatttttc 540  
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<210> 1166  
<211> 574  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI231808

<400> 1166  
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ggggtgggga ttttctcccc acaaataatg actactatct atttatgtgg cttactacgg 180

gtataattat atagttttgg actttaagaa caagaaatca aagtattcag aagagacggt 240  
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 gactacaggg agctacggga tggtaggatg gctt 574

<210> 1167  
 <211> 578  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI232006

<400> 1167  
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 gatctcctct tctcatcac tgccgaacag gtcaatgtca ttgtcctcgt cgtcctctgc 180  
 tgggtgtggct cctttcttgg ctgggggctc cacttgacgc ataggagaga catgttgggt 240  
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 caacttgaa atggcctgct gcaaactctt caccacgcct cgaaagtctt ggttctctac 360  
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 tccagggcct gaacttccag ccaaggattt ctggatgttc tctctggctc ttgcaatgtc 480  
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<210> 1168  
 <211> 586  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI232065

<220>  
 <221> unsure  
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 <223> n = a or c or g or t

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 aataattggg tacggctgaa tagttaagaa acctgttgct tttatttaca ctcttgatcc 180  
 agcaagaatg atgacatggc ctcggggtag tcatctacac tggctttgat tttatgacct 240  
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 gttccccaat atttcctcca atctcatata ggaaaacttc tcctttcttg agtgtctggg 360  
 caacccact ttcttggtc agaaacctgg caagtacgtc gctggctttt agttcttcag 420  
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 gaggaacgtc agcaccattt gcagctctgn cttgcttttc gtgtttttcc cgggtcatag 540  
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<210> 1169  
 <211> 582  
 <212> DNA  
 <213> Rattus norvegicus



<220>

<223> Genbank Accession No. AI232087

<400> 1169

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ttcatatatc agtaagtggc tggaatagtt aatttagtca tgtatcctgg aaaatgagtt 180
tcaaaatctt cctctttttt tttgagggtca gctactgtca ataatggaca ttaggcaata 240
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ggaggggaatg agtaaaacat caggataatg ctgtcttcat ttttaaatat atattgttgt 420
tttaattgat acatagtaat tgcacataat tatggcacag tatgacgttt caataatgta 480
tagtgtacat aataatcaaa tgaaggtaat tggcatgtca caccagatgt aactatttcc 540
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<210> 1170

<211> 539

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI232103

<400> 1170

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agtgggggag ttgggagagt tgggtcccac tcctcaagca tgaggagagc cagttaccac 480
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<210> 1171

<211> 486

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI232209

<400> 1171

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cctttgtctg cagagcagga ccagcatgct gacctcagc acagggattt ggtttctgct 180
tctttatttc tgtcttaatt gctatggttt aaactgacca gtaagctcct accctgcgat 240
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agtcacactt gggactcagt ggagacaaat aaaaagccaa tcacagcaaa gtatacatca 420
aactctcaag tgcagcgact tgccaagtcc cagaactttc tgtttgagca aacgggtactt 480
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<210> 1172

<211> 564

<212> DNA

<213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AI232266

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 tatacagaaa gcaagcagga tgcagactat tcccttgga aaatctggaa tgaaatgaat 300  
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 gtggctgcac tgacgactgt tctcagcaga ggtcagacag gtggtaatgg agagcagaca 420  
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<210> 1173  
 <211> 588  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI232269

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 ttttaaattt gaaaaagaa aactaaaata agaccaaaca accccaaacc caatcccga 180  
 accaatacaa gtagtgtagt gatttaaca tctcgtttct gatgttcacc tggcacaact 240  
 ccagtgtcaa aacccaaaga actcctaaac taagagatca gcttagggta atttaattac 300  
 ctaaattctt caaagcagaa acttggaatt tttgtcttg gaaatggtat aaaaatttta 360  
 atagcaaaac ataggaataa aaacatatta acaaaatgta ttcaatcatt tacaatacaa 420  
 acaaggaatc tgcagtctgt tgttgtagcc tgacaaaaga aatgtatcca ttaagaattt 480  
 gtgcacaatg taattgcaa tatgtacagg gctttaagaa agccgacaag gaggacttta 540  
 cagagggaca gttggccagg ctctattaga ccagacaatc aaaatatt 588

<210> 1174  
 <211> 618  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI232273

<400> 1174  
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 gcaggcaact cattcacaag ataaagcaaa tgtcccagcc gttggcgatc tcctagcctg 180  
 tcatgactag aggacttggt cccacagtca catgaacccc tacacaaaac cacagtgcga 240  
 agtcaaggaa gcaactgccag gacactgtac agcagatggc cacttcccga cggcctctcc 300  
 tccaggtgag tcggaagccc acagcctggg cctctgacgg atgtcactgg agaaccagct 360  
 ggcagccacg tggtagaaac agctttcatt ggcacatctg tactttcaat ggaaaagaaa 420  
 tgaagtcttt aatgttagga ggctgtgctg tctgctggtg acatgtctgg ctgtgggtccc 480  
 gctggccctt ggcaactcgt ctcatccaca cacagcggag cccgctgtct gtctcacagg 540  
 atcacttgag ggtcttgctg aggttagaga agccaatacc aacacaggtc attagcactt 600  
 tgtccccgcc cttgagtt 618

<210> 1175  
 <211> 641

<212> DNA  
<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI232294

<400> 1175

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attattaaaa ataatacaag acatgtgcat tacaaagtaa agaatcggaa aacggtgagg 120
gttttagttct aaagagggtcc tagaccacaca tcttatcacc attagcaagg ttaggaagtt 180
gattttctggc taatgatcat cacagggttct ataatacaga acagagagga gttttctaac 240
catcatcacc acacactaac catcaacact caataatagt gtaatatctt tggaaaagcg 300
caaaaagatt tcttttagtg aatcactttg gaaagagtaa caaacagggtc tctggattcc 360
caaccttccc tccaccatcc tgcaaaatcc atgctggggt ctggcgtgag gtctgggttt 420
taataggagg cacaagggtat gcctaactaa ggtcaagctg tgcccaccac catttgcct 480
gaggactatg caacatctct ttctggggagc cacgttcctc ctcaagctgg caccaggctt 540
tagccttttc cttctcctgg catgaaatcc ctgaggtaat tccagtgtct tgtggtcatt 600
gtctcagcag tctatggagc caaagaaagg gcacaaaggc g 641
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<210> 1176

<211> 614

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI232303

<400> 1176

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cttctagccc cctcaaaagg ataaggctgg gttcatgaac ctggggtaga aatgtcccct 120
atccctcatc ctcagcttat tagactggaa aagtttgtgc aaagagatca ccagagggtgc 180
caaatatggg ggttgggtca ggccagggca gcagatgaag gaaaagggtga ggggtctgtg 240
gagggccccc gaaagaccag gggagcagga gctagggagc caaaggagggt ggggaagagta 300
gggctagagc ctaggagtgg ggtccattct gaagcagggt ggtctcttgg ctcccgatgg 360
acaggctgtt tacagatagg gcaggctctg cgggtctgag tgagccagggt gtccacacag 420
cgactgtggt aagcatgagc acagggaagt atccgaagct tgtcccgcgc ctcatactca 480
tccagacaga tggcacagac atcatactca tctccttttt gataatcatg agtaggaatc 540
tgtttcagtt gctcttttgg aagtctgttc cggtgaagcc gcttccgggtg ctggatgcaa 600
cgaactatca atac 614
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<210> 1177

<211> 601

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI232328

<400> 1177

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atagcgccag aggtgtgagg ctctcgagga agccatgcga gcctgttctc aattactgta 180
gagggctccg gtctcactta ggctctgttg ggctcctgga agtgggggtg aagtgggcct 240
ggagagggtc ccagcatttg tagtagtcct catccaaaca accacagggtc ttgagtcccc 300
acttgggtgac tgccaaactc aaggaagatt caaacataaa tgccatgggtg ccgtctgcta 360
tctctcagg ttccagtttg gccttgctgg ccttctcaaa gcagtctgag tcggggccat 420
gaggggtcat ggcactgtgc aaactgccat gatggtcttt ccaaagaaag ggtggtgata 480
tcatttacat ttttaaatta aaaaaacata acagaatata gggccagtag cacagcccac 540
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cctgtaaagg catctgccac cgaggctggg actctgcttc tgatgcctgc gatccacttg 600  
g 601

<210> 1178  
<211> 601  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI232340

<400> 1178  
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cgaaacagtt ggcattttat tgctagtgcata tatagtgtca cagttgatac aatttcatta 120  
caagtggaaa aatacactgg ctgacattgg caagctacaa tacatctata tgtcatatat 180  
atctctttac aaatcgccag tagttcaaga ccgtagaggt tatctactga cactactatg 240  
gcttctcttc aaatatagga attgactaca aatatattct gaaatacatt tgtcttccaa 300  
agaaacataa aaagtgcaca aaaatatatg taaaaaatgc cttgcaaata gttatcaaaa 360  
ccaccagggc cgtctgtgat cattaggacg tatccaattt tatcttggtc ccatttctga 420  
ttggaacca gaatccccac tgtggcttca cggcaagatt ctggcttatt catTTTTTt 480  
atctctgata ttcgaaaact cagagcccac ggagccactg ttgaaatata taggactcag 540  
gggcaattgc aaaagtccaa ttccttaaag ttttcaaatt taaaattgcy tttcggataa 600  
t 601

<210> 1179  
<211> 572  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI232341

<400> 1179  
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gaaaagaggg gtgtaaagga acccccatct tctaattctag ttgggggaac aaacatggag 180  
tagatctgtg ggaggtgggt ggagcaacag aggagggctt cctaaagcac aatggggccct 240  
gggaatcagt cctctgtctt cctaccagac cctgcccctg aaggcctctt ataaactctc 300  
agactgtgag ctatgccatc actgaggatg aaaaaccagg aggtggacat ccatgacatt 360  
ggttcccgtc aaccctgtat gcagcaaatg tgttccaccc tggaagctgc aaaagaacgt 420  
gtacgagtca ttgttgctga ggaaggtggc aaaatccagg ttttcagcag aagcctggct 480  
aacaaggtca gacatgaccc agggcccggc cacttttgta ggcccgtcct gcccatcagt 540  
gcctccactc aagaacagca catcaacagg cc 572

<210> 1180  
<211> 506  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI232408

<400> 1180  
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ggtccaacta ctaagctagt aagatacgag acattgatta agtttagaaa ttataatgct 180  
tttctttttt tggcattatt taaaaaaatc tttaaaatac atactcaaga gagaaaagtg 240  
actacttaca ccagcaccag tctaaaaagt ccattttttt ttttttttgt aacaatggca 300

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catgaagtta cctgcacagt ctttaggaaa ataaaccgga agctgggaag ggcaaagggtg 360
gcctaccagg agggctacat ggaagtgagg aggattctaa gaaaggcaag gggacatgcg 420
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acttttctctg ctatcaatag aaaaga 506
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<210> 1181  
<211> 446  
<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AI232409

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ccagtccctt tctcaaaatc acagataaga ctggcctcct tcccttacc ctagctctgc 180
tgtagaattc tctgctgcct ctctgtgtct tcaagcccca tgagactcat gcccaccccc 240
accgattttg tgggatgaga gcgcttatga tgtggaggca gctgggaagt gtgaacaaga 300
ttccagagct acagcctgga aggggttgtc ctcggtgggc cctgtaggaa ggagcagatg 360
atgtcagcca cgatctgggg cttgttctatg tggatgtagt gattgcctgg gatttccaca 420
aactggaacc gtccttttag ggtgga 446
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<210> 1182  
<211> 359  
<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AI232419

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agtgtctttt tttaaatcaa tctgcagggtg tttttaccac cacagaatca tgacgacttg 120
cagttatcat tgtcctgtaa tgattaaaac aatgggtcaaa taatcagcaa ggtacttctc 180
taaaatactt aaaagatatt ctgaggagtg cagggcaggg acataagctc acccagaaac 240
acacaattca ctctgcatgg ccaactagac cccaaagggtg gctgagctga gctgagcact 300
gctttgtccc atgtcctgtg tgtacatcca cagcaggagg agatggcaaa gcagctgcc 359
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<210> 1183  
<211> 436  
<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AI232489

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<400> 1183
gacctgattt tattaacagt catccagctg tcttctatcc agctctgatc tcaggggggcc 60
cctatgacag ttcagccaca gtgtgtcaca cattccattc ccaggagggt gggtagaaaag 120
gtctctggta actagcagca atccatttct tatgatgggt tgcttgactg ccatttggtc 180
tcatgtccca gaagaatctt ctctgtgaat agtcctctcc agctggaccg ggaggaggga 240
cgaagcctct ctggtaaaca ctctgatttt gtgaccattt tctgaatgag tacgctgagc 300
tctgggtctg aacatgctgg gacgattcca gatgaccacc acgtcggtt ttcttaggtc 360
ctttgttcac aggtttgtta gtggtgtgga cttgttctgt aagatgtgct gagtcttcaa 420
gaccacctga tctaaa 436
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<210> 1184

<211> 547  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI232494

<400> 1184  
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 gtgtctgtga tgccagggtc agcatgacca tccaaaaggc acctgtctag gggaggcagc 120  
 tttctgaggg gatccagagg agcagtggcc aatggcaa atctctgtga gcacactgtc 180  
 tgccctgtgc tggggaagag ccccccactat gtgtcgccct tggaccttgg ttgtgagccc 240  
 ctaagaatat ttctcagggg attttgatcg acaggatcac actctgtggc tcaagcaggc 300  
 ttgtaattct ctacatagac aagcctgcct ctgaactctc aatcctgtc tccagtcttc 360  
 tgcgtactga gaatacaggt atacgtcact atgccccact cctagagAAC agttctaagg 420  
 tcaagacatg atcaagatgc ccgtgacacc atggcagagt catgccaagt ttctgtgggt 480  
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 aaggcca 547

<210> 1185  
 <211> 535  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI232534

<400> 1185  
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 acaagactga gcccatcctt gaggggttgc ttccacctcc aggatgctct gggcttcttg 180  
 ggctgactca agacttcata ggcagcctgg atctctagga agtgccctct ggcctcctcc 240  
 gtctgggtgcc ggttgtggtc tgggtgccag accttcacca ggtctcggt actccgatgt 300  
 atttcttcat tgggtggctc ttctggaatg ccagAACct ggtgagccag ctgacgtttc 360  
 tcatcctgaa aactgtcaac aaattcatag agcttttccc attcctggaa ctggctgcta 420  
 ttgaagccag gagccccaac cagtagccac cagatccggc aaggcagaag caagacagac 480  
 tccacgagac gaccgagaag tgggaaaaag ttgaaccaac tcaagaaaga accaa 535

<210> 1186  
 <211> 510  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI232552

<400> 1186  
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 gagacaggg ttctctctgt gtagcactgg atgtcccaa actcactctg cagctcaacg 180  
 tccagtagga atacattccc taggtcaagg acacagggac agcaactcct acaggattcc 240  
 agaacaccag tgtaaagaga aaatcctctg agacactgac cctcacctga gcagggtagg 300  
 cggcctgagc cagccctcca cccttcagct gggacagggc cttgcggatc gtgttcagct 360  
 cctggattgt ggctcctcgg gccgccagca gcttgggtgag cgtctgtttc tcctctagt 420  
 tgacaggtgg gataggagcg ggcagcaggg ctgagcccc acctgagatg agcacaagca 480  
 gcaggtcgtc ggcagtgagc ctctttgcca 510

<210> 1187

<211> 370  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI232611

<400> 1187  
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 ctgatttcac atagtcactg gacattaaaa tttgaccttg aatctgccat gtctgttaca 180  
 ggcaaacgca ctacaatctg caggaggctc tgttgtgagt actgtccagg tgtttgcca 240  
 agaaggatag aatttgcttc catgcatcta tctgggcttt tgagtgagcc ctgacctccc 300  
 ctcccagac cacagctttg ttcactattt tgtgcaggga agctgggcac atggggaagt 360  
 aagtggtctc 370

<210> 1188  
 <211> 448  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI232612

<400> 1188  
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 tggttttatg aggtgctca gtgacttgga ggctagcctg ggctatagga gacctagtct 180  
 cacaacaaa aagatccacg gatgagaagt ttcacatcca tcaatcccat 240  
 ggggacagcg aggccttcga ccaccataa aagaaagggtg gtgtctacaa tactgtggt 300  
 tcaactggcag ggactacact tggccttgga aggagtccag gtcacatgtc acattccacc 360  
 cttcctgaga gccctccct cctggcctgg aagttcaaag tcagctggag acaaaggctg 420  
 gctggcgtcc caaacacact tgcaaatg 448

<210> 1189  
 <211> 605  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI232643

<220>  
 <221> unsure  
 <222> (1)..(605)  
 <223> n = a or c or g or t

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 ggattttaaa tgtgaatggg tgccaacccat ggggactgga ggaggggtgg accagcaaag 180  
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 aaggccaaaag cacttcctta acattcgaaa tgtttcccta gtagacttgg tatagtaaga 360  
 gaatgattgc taaacatcct caatgtggtt ttcattatga aaaaacatgt ttcacataaa 420  
 atcttcataa tataatccag aggccaaatt tgtgcatgtt taaaatttga gtccaggcta 480  
 gatatttgga ttttccccc cttccagtgt ttttcatttt tataaatata tacctagnct 540  
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cagtg

605

<210> 1190

<211> 646

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI232700

<400> 1190

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agggtcaaaa aataaaacaa aacaaaaaca aacaaaaaaa accccacaaa acaaaaaacaa 180
agcctcctcc ttccttaaac aaaagaaagc caagaaatgg tgtctgctct agctcagtgt 240
gaaggcctcc ttagaggtag gggagcaact gactttatta ttttctaaca gtcagtgtgt 300
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attgcaaatt ttggcttctt ttgacataaa aatcacatc gtgtgcaaaa tgcttgcaat 540
gaggcgcccg atgggacaca agcagaggct attcaaccag aacgttttaa attccgcgat 600
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<210> 1191

<211> 594

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI232706

<400> 1191

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agctaactca gcaggcatgt gcacgcgtca ctttctgtc cgtgacaagt tttggaaaat 240
tacactttca aagaaccagc cttacaagta gatattcttt ccaaaaaata aaaccagta 300
tccaagtcct gaaaactcac aaaactagat gaaaacatgt ggtggtgtca gctgcgggcg 360
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actggggagg tgaactcact ccagcactc cctcctgagc tggaaattgt cttattgctg 480
agttatacac aagtcatttt ctttggcaac atcactagct aacaccaagg gacaagtgt 540
aaggtttggg ctgtcagctc tccaagcact gtggctgccc ttctgtgggt ccca 594
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<210> 1192

<211> 595

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI232784

<400> 1192

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ggagagatgc tcaccgggcc agtttgcttt tctctgtggc tagggagggc ctgtcttcca 180
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cataggctga ctcatctgag gccaagtata cgcagagcag ggcgacctct tctgcagatg 300
caaaccttcc ggtcttctgt ctgttttaga aagctttcag tgctctttt ggatcatctc 360
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tggtctgtat tctttcttgc agagatgggg tgtcaaccgt tcctggggcac acacagttgc 420  
 atctgatgcc ctgctggatg aagtctgcag ccacggactt ggtgaggccg atcacagctg 480  
 ccttggttgc actgtacaca catctgttct ccaccccttt gatgctggag gccacggaag 540  
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<210> 1193  
 <211> 476  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI232924

<400> 1193  
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 tccaacaatc tagtttttaa aaaaaatatg gaaataccct ctaatagcat atatgtcata 180  
 cataacattt cagatcaaat gaccagtaga atttaactca catttaatta aaacaaagat 240  
 gccatgagta acacgagctt tggctaagca ttaaaattct cttttacact taggaggagt 300  
 atacacacaa ataatgatc tgagaaatag aaaaagaaat ctgattagaa tttggagact 360  
 aatgcaagga gaagaggata ttaatacaaa ccctgctcg agtgcttgtc tggcatggac 420  
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<210> 1194  
 <211> 521  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI232970

<400> 1194  
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 tgggaaacag ctctgaattg agtcatgctg gggagggttc cgaccagtt gggatcgatg 180  
 acagggctcc cccacttcac ctttcccaat ggctctgacc ttcattgata agactgaatt 240  
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 ggccagagac accgtgtgcc agttgctgcc acacgcgaaa tggagacccc tggtagaggg 360  
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<220>  
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<220>  
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<210> 1197  
 <211> 553  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI233162

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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI233164

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<210> 1199

<211> 525

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI233172

<400> 1199

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 tagcagcgac accctcagaa ccgtggggtc cagagccggc cacagagcac ccttggaagc 480  
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<210> 1200

<211> 539

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI233182

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<210> 1201

<211> 537

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. AI233190

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 ccattcacca ggaggaagaa ggcttggtta gcattgagct gcaggcgcct tctaattatc 420  
 ttgatgagtt cgctcatatt cacgtgatca ggtacaagga acttggctct gtccaggacg 480  
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<210> 1202

<211> 596

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233262

<400> 1202

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 cagagagccc agggctgtgt ggaagctgtc gctgtgctgc ttggccagga acgtcagtag 300  
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 gctgaagagg tgacctatag tgacccattc ctccatgtct tccttcaggg gcagggcatg 480  
 tagcagggta gctagcacct ggggctctgt ttttcctgcc ggactggcca tcagcagacg 540  
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<210> 1203

<211> 567

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233266

<400> 1203

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<210> 1204

<211> 578

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233288

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<221> unsure

<222> (1) .. (578)

<223> n = a or c or g or t

<400> 1204

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tatctaccaa aatcaaaaca gaatatggcc ttactctt 578

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<210> 1205

<211> 474

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233300

<400> 1205

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aactcgtcca aattagctac aaacgcttgg caggatggac acgttgtgtc tgtgggcca 420
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<210> 1206

<211> 425

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233323

<400> 1206

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tgggc 425

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<210> 1207

<211> 469

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233361

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 <211> 124  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI233367

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 tcaa 124

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 <211> 424  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI233407

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<210> 1210  
 <211> 551  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI233457

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aaaggcataa tctttcacga tgtcacattc gatgactggg ccgtactcct caaacttggc 540  
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<211> 475  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI233468

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<210> 1212  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI233480

<220>  
<221> unsure  
<222> (1)..(401)  
<223> n = a or c or g or t

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<210> 1213  
<211> 411  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI233494

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<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233714

<400> 1217

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<210> 1218

<211> 556

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233717

<400> 1218

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aacagaccct cgtgcc 556
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<210> 1219

<211> 687

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233729

<400> 1219

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687

<210> 1220

<211> 609

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233731

<400> 1220

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tcagctaaat gttcaaactt aaggctgtca tggacacagc aattccatag tcttcttttaa 180  
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cactgtcata gcctgcattg tcagctatga tcgttggcaa cattctcagg gccttagcaa 540  
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<210> 1221

<211> 587

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233766

<400> 1221

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tatcctggga atcaagagct gaaccacat tttgaccgtg ttacatttct cgatcagcag 540  
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<210> 1222

<211> 389

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233806

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aaaaagaatt taaatagaga ctttttaaaa tttctctcat tgcaatataa tgtagtgat 180  
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389

<210> 1223

<211> 563

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233818

<400> 1223

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catagaagag tacaatcaaa aaaacgtaca acagattcct tctgcattag gaaacatctc 240
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aaaacaacca ctttcagagg actagaagcc cacagatcta agcatcagta aactttaaaa 480
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<210> 1224

<211> 516

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233828

<400> 1224

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taggggtccaa ccgggaagga gcagggtagg agatgggacc agtatctgtc atccacttga 180
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<210> 1225

<211> 561

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233835

<400> 1225

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agcttattca aggtcaccgc gctggctgaa gaccgaggat agagctgagg aagaatgctt 180
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gaattggcat ggagatgggc gtctggggag ccctgaagct ctcaccagga cttttacccc 300
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ccaccttctc tggcaaatca ggaaaaactc acctcacggt agctggagtt gatcttctta 420
gaacaagaga attactgaga tgaaagccct tccccgtacg tgtgtctggca ggttatcagc 480
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<210> 1226

<211> 553

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233836

<400> 1226

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 gggcgggtct ctcttatatc tactgtgctg tatatgctag ggtagccggg ctgcaagatt 180  
 ctggacaatt ctctgacctg gtttctgtgc tcccccgaga atgctggggg tagagatgtg 240  
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 tttccccag agtcatctta ctggctccctg ataggtgttt ttaaaagatt actttgtaga 360  
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 aaagagaaaat gcggaatttg ggagaaagga aaaccccggt aggcgggtctc aggagctgct 480  
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<210> 1227

<211> 376

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233902

<400> 1227

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 gcttttgtgt gggttctggg gatctgaatt cagggtgtga agcctatttg gctagtctct 180  
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 gcaattatag tctacttcat ttctcctttt cttttattca gtatctaggt actcagaagt 300  
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<210> 1228

<211> 434

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI233925

<400> 1228

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 aacacacagt ccaagtctgc tctactatggg tgaaaagctc tatgggtcag tttgtagggt 180  
 tgtaccaaac aggtcactaa ggagctcacg gtttttaagc agttctggag aaaggaagag 240  
 cagtatcacc attatctaga tcctgctaag gatccagttc tgagaggcac agagaaagga 300  
 gccctgggga gagcagtcct cagtgggatg tcatcataag gcagcttggc ttctccttgg 360  
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 atcctcctgg tgcc 434

<210> 1229  
 <211> 516  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AI234038

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 tgtgtctgtt tttaatctgg aacattctct atgaaacagc caattgttta cagcacacac 180  
 ttgacatttg actccagcac cagtggaccc gaagctgtca gctctggggc tataggctcg 240  
 acacaggaga acgctcttca ggccactgag gcttctagct caggtcctag catcctagcc 300  
 tttcccttcc ctggcacact ccaaaaccat aagatcacia accaagactg acccttagcc 360  
 aagcatggga cagaacttat gcatgatggg gcacagggca gacctttcct gacgtccacc 420  
 tggcaggcct ggctaaccag gaggcccgag cctcaacctt tccagggccc tacctagctg 480  
 ccaagcagct gggaagagga aggaaggaga aaggag 516

<210> 1230  
 <211> 319  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AI234079

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 aaaagcttct ataagcagag tategtttcc tgccccctcc ccaaaaaaaa tcagcttcag 180  
 gcatacatgt gtgtttatgt ctattccttg agaatgttac gttagcagtg cataaagttt 240  
 attccataaa aagagctaca agagaattcg attttcaaga gactcgatgc attgtgcttt 300  
 cagataaaaa tcccaagag 319

<210> 1231  
 <211> 530  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. AI234090

<400> 1231  
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 tgcagagaac taaagaaaac gctcacttgt agcttacaca cattaattct aaagaactga 180  
 cgggaggccc cgcacggcg cctacacttc cgatacttct gagttcatac accgcagaga 240  
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 ggatgtcatt attggacttc agaatcagtt tgtccccact cttttcaacc tcaaagcca 360  
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 ggttttggct gttgtcttca gtgagatttc gcacggcata caccacccac tgcatacata 480  
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<210> 1232  
 <211> 564  
 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. AI234105

<220>  
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gcatactga ctggcagtct cctccagagc ccttgaggag tagccaatct cagcagcatt 240  
catctggctt catagagaga agcagggagg aagtgaagcc tcctcaacc ccaccccaaa 300  
cctcagttcc gtttcctcct tgtgtccttt gacccagatt ttgggtcttac tgaggcccag 360  
tgttccaaca atagaaggag gtaggggcaa aggactggag gtctagagcg tgggtatctt 420  
cccaagattc agtctctgt gccacgggag acctttccag agaggtgaga taccagatgt 480  
agctaagag tgcttgggct atcacacgag agacccggcc tgactctgtg caggtaccat 540  
tacgggcacg gnacccatgc ggggt 564

<210> 1233  
<211> 610  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI234107

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ttatactaac ttacctagaa aagtgttaga aaaagaatct catattcaaa ccaatcatct 240  
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aaggggagaaa agtggacaaa agctactgaa tttacactca ctgtcctatg ggggaagtgc 360  
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gttttatagta tttttactgt ctagtcaaac ctactatgtg gtgaactgat cattcactac 480  
aaccttgagt tgatccaacc tacctttctc atttatagaa aactacaaaa gcttctttta 540  
ctagtgtact cttcccatca ggagtacacc tgccatctct gaagggtcac tgacaggaat 600  
caaagggagt 610

<210> 1234  
<211> 517  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI234133

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agattctctt cctgctgccc ctgctggtgt tggctatcta gctaaacaga tcaagccagt 180  
agttgttaac caaactcccc ctaatttgcc acgactgttc tctgaacaag tatcattgct 240  
gatgaagact agatgagatg ctaggctgag tactctgagc ttcaaagggt catttagccc 300  
aggggtgactc tgttgtgagt aagaggtccc caagcagaga ggacagtgag ggggggtgca 360  
caagcagact gtctgtagt aggcacatggc agccatcaaa gtgaagaagc aggaggcggg 420

gagttccgcc tctcccagcc caagggctga aagcctggtg ggaatcacac ttccgagtat 480  
 ggggggtggtg caaggtcccc ctctggagtc ttagtgg 517

<210> 1235

<211> 507

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI234152

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 cccaaattgt gaattcatgga acttttactt agtgcacaca caatctactg caaactgaaa 180  
 tactaatcta taacattctag ctgaattatt ggatccattt caggattgtg cttattatct 240  
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 gctgtaaaag aaatattgtt cagtgcaccc cctaagaaat aaacttcctt ataggatttc 360  
 tctctttctc tctctatata tatctatctc caaacagagg aagagcacia tgcaactttt 420  
 aagattacca cttaaagcaa gagaggtaag aacactcagg tactgcagtc gtccttgact 480  
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<210> 1236

<211> 357

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI234223

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 cactttttaga tacacatttt gggtttttat tgctgattac agactatgaa atgtgcattg 180  
 caagtcaaca agagattctt ttcataattc caataaaagc ttgaagaaac agacaacaaa 240  
 cacaatgaca agagaaattc ctgcttcaaa acaaaacatc agaaataagt ctccacagtc 300  
 acgggtctgac aaaaatttga aataacccaa accgtgcaaa agctccacag agaccat 357

<210> 1237

<211> 448

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI234361

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 aaaccctaag tctagatgtt tcagaatgag aaattttcag atttttagaaa ggtaattcag 180  
 tgcatacacc atactatata aaccctcaaa agagtgtgtg gcagcacacc ccaataatca 240  
 tacacattaa tttttatgca acaaaataaa tgaatattca cactaatggg ataagcagat 300  
 tcagtgtcag attagaatac atccagaggc aaatgacttt tggtatcaag cttatgaaaa 360  
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 tttgaaactt gtttgataag acataaaa 448

<210> 1238

<211> 501

<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI234496

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tgtctgtgct actgtaagag aagggagaaa gattattaca ataaataaaa atagagatgt 180  
aacagagaaa aataaatcag tctagatgag aagtattagg agcaacagaa atttcattaa 240  
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tatagcagca gagaagaagg atacatacaa gttaattgca catcagtccc atgcaaaaac 360  
gtggatcatt agccaaagca gtagtactca gaatccagct tgggatgctt gtgcagagct 420  
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<210> 1239  
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<212> DNA  
<213> Rattus norvegicus

<220>  
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gcagcaatag tgtttggtcc ttattctttt tttaaaaatt gtcataattaa aaagaaaagc 180  
aattggacca tggtaaaatg cactgctaaa caacaactta aaaacgcccc ttcataaagt 240  
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gttttaaat cagtaacttt aaggtccaca aatccagttt actttaaaaa ctaaagctat 360  
tttaaaactt aaaagaatat ctcaacctga ggagtatttt aggtcccaa tccagttttt 420  
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<210> 1240  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI234830

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tcacagcact tgggaggctg gggccagcct gggctacagt gtgaaatttt gtcacaccct 180  
caccatcc aaataagcca caaagtctta tcagaaaacc aaacagcctc aagcagaaaa 240  
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cttccaaacg ttgtaccaa agtatcctga gagatattct tcctcttctt cggcttgaga 480  
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tgcagaacat actctaactc a 681



<210> 1241  
 <211> 575  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI234843

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 gaaaagccca ctgtccctcc atgctcagac aggcccaact tcacacacta gcctaactcc 180  
 taccttcttc atgcagcacc atcaccacta ccaacctcac agaattaaca tgcagagacg 240  
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 gtgatgcgca ggacagatga actggctggc acaagctagc ccagaatctt tggccagggtg 360  
 gaatgattca cactatgcct tcacgggtgtg gccctgttg gtatctcttg ccacatcttc 420  
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<210> 1242  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 ctgcactcag ttttgaactt tgggcagttt cccatagcct cctccattca ttaattttaga 180  
 taacttttaat aaaatatcaa tttggagata attttaagga cataatgaaa gccgaatttc 240  
 taatacagtt cttaccta atctctatgcc ctttatgccc ctttgcccct aggagagctg 300  
 accccagacc tgtgagaatg ggggagctgg ccctgcacct cacctgagta gcacagtaga 360  
 gctgacattg gctgcagggg cagagtaagc caggcctgag tttgtgagca tgggagagct 420  
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 cacgaggtct tggttggttc cacaggggac agcagggcct tggagccaat gtgtggngnn 180  
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 ccggggggcc aagtcaagtg gcgctgtagc agacaggcca aggaaaggga aaattggctt 300  
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 gttctattga aaccctcgtg cc 442

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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 ggaattcagc aaaaattatt aaaacgttca cgtcccaaaa atggggctgc ccacttgccc 180  
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 ctggaaggga tactgagcat ggccatccca gacgtgcccc taaaagtggg agctggggct 360  
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 caggttcaga gagaactcca cctcccaga actaaccoca ggaaaggaaa gctgggacac 480  
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 gggaacgtat gtggactcct tcatacctt gagccacaga gccctccctg cccctcaag 600  
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<220>  
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 ggcagagcag agttggaatg gaaaagacag ggctggagat gagaacagtg gggagcgggg 180  
 atgcagaatg acaacagcca cacacgtgcc agtcaaacac tatgtccctg cagcaaatca 240  
 gataccaaca agtgtctgca gtggctgggtg accctgccgt ggatgcagag gaaataactca 300  
 gtattaacag aaaactgagc tgcagccact atgagactcc aggagagcac caggtttgct 360  
 gttccttgta agccaggaaa gctggcctct cccaggggga agcagactga cactcaccca 420  
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<210> 1249  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI235349

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 cgccactgaa ttttcaatac aaaaagttta caggcgccgt ctgctataaa actacagcgt 180  
 tgagatgggtg gctaggtagt tggggccctt tctcgccgt ccaccgcgca ccctgtgggtg 240  
 ggtctgctgc tagactcatg tggattctgt acatggttat aacaggatta ttacagctcc 300  
 agcatgtttt aacatactac accacagttc gataccatga gcaacagggc tacaccacgt 360

agtgttccc gatgtgagat aggagggtag aaccagttag ctggactcac cgaagcacia 420  
gtccaggaca actctagaaa gatctagctg tctctatacg attcttaaac atctccatcc 480  
ttccaaaccc ctaaacccca acaaccgat aacattaatc tttcattagt tatataaaaa 540  
taatcttaga ttcattgctg acatcaaact c 571

<210> 1250  
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<220>  
<223> Genbank Accession No. AI235360

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taatcacggg aggtcttggc atcaatgaag tgggatgatg ccacagggctc ttcctgcatg 180  
gttgccatcc agagcttgag ttttgggggtg tgggtctatac actcattgag ctccagtgct 240  
tccagtcgct gaaaccacgg ccaaataaga taatcgatca ttgagagcga attcccaccg 300  
aagaaggctg tcctcttatt agccatagcc tcttctagct tgctgaactc tttcttcagt 360  
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gcctcgtgcc 430

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<212> DNA  
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<220>  
<223> Genbank Accession No. AI235460

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catagaacia taggcaattt catccggagc gtcattagcc attcattctc tctttctgca 180  
caggaatggc tgccctgcag gggcagcaac tgctttcagt caagtctcca agctcaagct 240  
cccagccaaa gcccttctc ttgcgctgta ggttggcccc acctggagca aaccttagct 300  
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cc 362

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<220>  
<223> Genbank Accession No. AI235584

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acggaacggg ttaaacccca ggtagtactc cttgcacatg acctggtttt ccatgtgggt 180  
cgaatgctct gtggcaggac tgacggggca gcagttttca tacgcgtcac tctgtggggc 240  
ccagatggaa ccaaacagtc cagacatggg agacagactt cgggtgcttg tgaggttaga 300  
tgagaggttg acgagactgg cgtgccccca ggcagcaggc atgctggctg gagtgttcca 360  
ggtagaggag gtgccgtggc caatgaagtc ggtctgaact ttcgaggagc aggggaagcc 420  
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gtacacgctg gaaaactgg 499

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 <211> 494  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI235675

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 ggggacaggc cttaggctgg cagagggacg gctgttctga agtacctggc actctgggct 180  
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 cccaatttcc tcctgatggc agacctgatc tggagcagga caggacacaa gagtctcgtg 360  
 cagcactaag ttctctccag cactccagcc aacaggctga tgtgaagata actgtgagga 420  
 ccctggaccc ctggacccct gctggctcct gtgaggagga ggcagggatt ctctcaaagc 480  
 tgggtctgag gccca 494

<210> 1254  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI235689

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 tgtcagatgg attcctgggt taagactggg tcgggcacag tcccctttgg ccagacaatg 180  
 gcatgaacca cacaggagct tctgccagt ccaaatttca gtgagggacg actagagctc 240  
 acacaggtct tgtcctcttg gcctttttct cagacctcac agcgtcgtca tgggctttcc 300  
 tcttctctgc aagcttgttg gcctctcgga ttttgcccg cttgccaaac atgatctttt 360  
 gataaaggta cttctctcgc ttcttcatca tcatgatggc caggcgcttg gcctcacttt 420  
 cttcctcctg ggccaaccgc tgccctgtct ccagcttcac agtgccggcc ataacctggg 480  
 gcttcttccc tcccataggc tttgcggagc ttccggacaa acaccttgta ctctcggaac 540  
 ttgttgacga tgggttcatg gaggaggaat t 571

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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI235842

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 aagatggtga gacgaaatgt gaaaaggcaa attcacaaag gcatttcaac agtgacacagc 180  
 tctacacca aatgctgcac aggaatacaa tcaaaaacac tgtgtgccct ctcaaggaaa 240  
 ggggtgtcct tctattgatt aacaatacaa aggcctctt gtgagtataa gttcttgaga 300  
 ctgcagaaaa aatgaaaata catgtctctg aaaactgatg ttctcaagac accctactga 360  
 cctcactcag aaaccggtt gcctctactg aaaaagggtg cacctcacc agggtccagt 420  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI235895

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 agtggctgta gaaggcaagg ctagaccttc aaatcaaatg agaatacatg atctttacat 180  
 taaggagaaa gcattataaa agtacaatct gttaaagtct agaagacgta ttgaatttgc 240  
 tgaagaataa gctcttttatt tacctcttca aagaaccaat tattttcttc acttccttgc 300  
 gtgcacacct gtcctctttg gtgacgatag gcaataacaa tgccaagtta cagaatttcc 360  
 aagcctcccg agattcccca agatcaacat aacacttggc cacatacata tagttggaca 420  
 cagaataccc aggttgcaat tcttcagtct taaggaagtt atgcaaagct tcatgaactg 480  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI235948

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 tatatcatga ggaacgtgac aaaaaaagca aaaaaaaaa acccaaaaaa caaaaattcg 240  
 aggctacttt atgaggttgc atgaaagagt cacatgttcc cttaaacttg tgatttaaat 300  
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 aaatagcata ggagctggaa tttgaggagg ccagaacagc ctggaacgtg tttctcttgc 600  
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 ccaccacact 670

<210> 1258  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 taaagcagct cctcacttcc tacctgtcag acagcatgga catgttccta aactggggca 180  
 ggttgccctt tctcctgaga aatcttagca gggtaaaagt tacttgccag ccagtctctc 240  
 tgtgtgagaa agttccttct aaatttcatc aactgagtag taagggttct tgaccaggcc 300  
 cagagacagc tacagccctg ctttttatct ggtgtgcaac ggccatgggc atgtgaggct 360  
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 tgtgtccaga cagcatgcag cccagtttag gaagacttgg gtgggaagag gggtagagg 480

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ttacaacctc atcaaaaaac atggtcgcca gcttgaggagtg gagcagaaaa cgaaattcaa 660
aggaatcga gaa 673
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<212> DNA
<213> Rattus norvegicus
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<223> n = a or c or g or t
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caggccctc aggttgctgt ttctctgctt gtagaaggaa acaaaagaaa cctgtggggc 240
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<213> Rattus norvegicus
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aggcattttt ttttttgcaa ataccatgca aaacaggcag ctggcgagag ccttaagaga 240
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gggagaaaaa gaaacaaaaa tgccttttgg cgtttcaaga tatttggcac tctcgtgatt 360
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aaagaggggt tcgcacaaca gacccccaag gggagggttag aaaaagctcg agcatgtttt 480
gg 482
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<211> 484
<212> DNA
<213> Rattus norvegicus
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<220>
<223> Genbank Accession No. AI236036
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gctggcagga gcaggaacag aataagtcag gacaaactga aagggtttag aggaacctgg 420
cagtatactg ggatttaact ggatgccaag caggcgaggc ttgaagttct gccttcttca 480
tctt 484

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<210> 1262

<211> 454

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236066

<400> 1262

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atgattcagt tagtaacact ttcacgagtc attaggactg atattgctct gccataaatg 180
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gagagactga gtcactagct tgtcactggg taggtgcaca gcttcaccaa aaagagcttg 420
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<210> 1263

<211> 687

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236084

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agacgccggc gccgtcctgg tcattaaacg ttcccaagcc acagttttta caacctgct 600
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<210> 1264

<211> 292

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236089

<400> 1264



Figure 1 consists of 12 maps of the United States, each representing the distribution of a different bird species. The maps are arranged in a vertical column. Each map is labeled with a number (1-12) and the species name. The maps show the range of each species across the country, with some species having very localized distributions and others being more widespread.

- 1. *Spizella socialis*
- 2. *Spizella socialis*
- 3. *Spizella socialis*
- 4. *Spizella socialis*
- 5. *Spizella socialis*
- 6. *Spizella socialis*
- 7. *Spizella socialis*
- 8. *Spizella socialis*
- 9. *Spizella socialis*
- 10. *Spizella socialis*
- 11. *Spizella socialis*
- 12. *Spizella socialis*

<211> 548

<213> Rattus norvegicus

<223> Genbank Accession No. AI236106

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ttacaaaata	taaaacaaaa	atttgaaaaa	gaaaaaagaa	agaagtacct	ttctggctac	180
acacatgatc	agcttttagca	ctgaaaggtc	cccccttggtg	ggtcacaatc	acaggttcaa	240
gggttaaaac	catctagcag	taaattctac	aatgatgtag	agcatcaagt	cactgcagtc	300
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aaaactgttg	tgtttgtctt	gtttcttttt	ttttaagaaa	atgctcgaaa	acaaccaaga	480
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<211> 612

<213> Rattus norvegicus

<223> Genbank Accession No. AI236146

[illegible]

<211> 503

<213> Rattus norvegicus

<223> Genbank Accession No. AI236227

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gtctcctttg taatagtga aacaacctct acatatgggt aaaagctctc ttgaccccg 360  
tctttccagt agcgctccgt gtcgaaggac agcttatagg tgcctggctt catctggctt 420  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI236332

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aatttcaaac atgcaacaac gccactggta ataaagcttt ggaatggatg ctcaactctat 240  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI236338

<220>  
<221> unsure  
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<223> n = a or c or g or t

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<210> 1273  
<211> 500  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI236366

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gccgggtgta tgtgggttcc atctactatg agctgggaga agacactatt cgccaggcct 420  
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ataagggtt tgccttcgtg 500

<210> 1274  
<211> 542  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI236461

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aaaacagaca ataatgatcc taatccaggg aactaacttg atgatttaag ggcatttttg 360  
agacatcaga aaagcaatta aagaaaaaaa aaatcacaac catctggaga aacattcttc 420  
ttaatctaatt attaatgctt gcctgtaaat tagtcttaca gttgatgcta tagtgtggat 480  
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ca 542

<210> 1275  
<211> 321  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI236473

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aagtttgaca actatgcaca catagaacat gcgggtgttt aaaaaacaga acaaacaaaa 180  
acaccacccg attctgtaga accagcatca tttcaccagc gggagagcac caagcaaggc 240  
accattggaa agacaacaca cttggaaagt ctctataaat aaagcaaatg ctaatctggg 300  
cgaaaaatcg gtgtcttttg t 321

<210> 1276  
<211> 490  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. AI236484

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gttccccacca cagtctgctc agacacagca aacttggtgg ttctatatta aaaggctggt 180  
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 aaatgcacaa aaaccaaaca gcaaatattg agatcttttt catttgaatg taatcttaat 420  
 gctattaaat acacaaatat gctatttttt attaccaat cctaattatc taaaacacac 480  
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<210> 1277

<211> 439

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236566

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 cagcagcaag ggctagagac agaccacagt gaggagaccg caggtcctga ggggtggggc 180  
 aaaggcatgt gtactatact ggcacagtc acttgggtga aggtagaggt gggatagata 240  
 ctgatttgca gataggaagg acagtgttct cttgtgcaga tggagaaaaga ggaatcctgt 300  
 ggacaggaag tcctttttac atatttgcaa gagcagattt cacctcaaag gtgggtgttg 360  
 agggaagaag gaaagtttat tttaactgtc cacagaaata gatatgggaa agaaatgtgg 420  
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<210> 1278

<211> 526

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236590

<400> 1278

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 agacactttc ccaagggtgc tttcaaatgc tcaacatcaa tcattgaaat gcccacagag 180  
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 gactcaggac cctggggtgt gtgccctgag agggaccatg acattgtctc tgtgttaaag 300  
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 gttgtggggg gaagccaaac tgcttctcct tttttttttt aaatcttcag tttgctaaag 420  
 gcccaaatgc tatcacatta ggggccttcc tagactttgc tttcaatgat tggagaaaag 480  
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<210> 1279

<211> 567

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236599

<400> 1279

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 ctacgctttc tcgatgacca gaaaatttca gagccctgg gagccagaa tggttcctac 180  
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ggaggggggc tgtggccagg cacaggactc tctacccata agacactttc tgctcaccca 300  
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<210> 1280

<211> 625

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236601

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 caaatcactc tactggacag acttaatttg gaaagccctt atgcagatca gactcagtct 240  
 catatgaaca accccggcca cacatgcgga aatgaagagc aaatgcagaa gaacacagaa 300  
 aacccttgg caagaacagc tgctgcagac tgagccagc gctgtcagtg cagttcacgt 360  
 cctcagaaga caaacgacct cctcctcag catatgagca gcaatactgt acagagctca 420  
 gtggggtccc aactccacag gagcctgtca ccaaagtcac tctcatttag ggtcagagac 480  
 tacagactca agctttttct tttttccctc ataatacaca aaatgtctag acagtcttta 540  
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<210> 1281

<211> 481

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236679

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 cagtaatttt tgaagacatt ttaaactgaa ttggctatat cagtgtagta tcatttgtaa 180  
 aattacagtt aaaaagtttg gccagtttg aaatccatct tatttctcgg ccttccacta 240  
 ctcaatatga agctccattc tggcttgac aggggtgggt ttcagctact aggccaatgt 300  
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<210> 1282

<211> 519

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236746

<400> 1282

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ataataacaat atgtggctag ctgaaattgt ctatcacata gcattttaaga tataaaaaggc 180  
ctcatgctag tttgttaaac gcaaaggcta ccagacaagc acagagctgg atatatccat 240  
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gctgtacaag tgacacttga ctacagagtgg attagtcttc atgcctggac tgaaccccac 360  
agctcctgta atttagactt taaacaaagt aaaaagcaaa acccttttct gtatgaaaaa 420  
gaataaaactc aattttacct ttggcaaata atatccccc aatgtatatg caactcaaag 480  
aactcagagg ctctctagac aagcttctga tcaacacag 519

<210> 1283

<211> 652

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236753

<400> 1283

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gttgaatgca tcaagctagc tggcccatgg tcaaattttc ttctgtact aaaatgtacg 360  
gcagcaatgg gataaatctt aggttaacag tatattcaga tgcactgtgt atagcaataa 420  
aaagctccag tgatgttctc tttctaaaga cacactgtcc ttctggggag gtgggatctg 480  
actctaactt ggcaccatgt ctagctcatt ttacaaaatt aacctttaca aagatctaca 540  
tcagcatcta gaagagtcac caatcaatga tcaagaaaac tggtatttgc ttttctttct 600  
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<210> 1284

<211> 420

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236761

<400> 1284

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gttttggttac attgcagatt ttaatgtatt taataaatgc aacatgcaga ttaagtgcag 300  
tgtatactga gtattttaa taaaatgtac atttcataaa tacagtttca agagaaagca 360  
tcattttgtg tataactaaca cattaagtgt atgtcagaaa ttgatgtaca aatatatatt 420

<210> 1285

<211> 522

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236771

<400> 1285

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<210> 1286

<211> 655

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236772

<400> 1286

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cgtggaccac actgcctgcc acaaggaact cctcactgag ctgacgtcac catcatcaaa 600
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<210> 1287

<211> 571

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236773

<400> 1287

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<211> 446

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236947

<400> 1288



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 atttctcaag tctttccata atggagccac agtgactcag ggactcagca ctctagagct 360  
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<210> 1289

<211> 382

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236972

<400> 1289

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 aacagcgctg atacatggga cggaatgttt cagagcacat gacaccgctg tgaaatgaca 240  
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<210> 1290

<211> 410

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI236989

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 aattctgtca aaaagacact gtgttgggga ggagagtctg ggattgccat gtgaatcaca 240  
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 ggctatttct tttagttggc tgctggctgc caccagtgtg gtcagatttc tctgcattag 360  
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<210> 1291

<211> 469

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI237002

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<210> 1292

<211> 441

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI237124

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gcaagaaagc acccggccct ttgggatata caaatattta tcagattctc tttgcttggt 360  
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<210> 1293

<211> 451

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI237159

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<210> 1294

<211> 471

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI237189

<400> 1294

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aaaaacattc actctgacag ttaacatttt tctaaatgta acaatttgaa gtttctaatac 180  
cactcactct aacatacagc cagatacttc ctatgttcct aaacaaacaa aacaagacaa 240  
gacaaaacgg aacaggaggt attactctga agcccccttc cccaggggaga gtagatagga 300  
cttgtgaaga gaaacccttc ccttttagcca gtatttttat tccctacagg cttcgcaaaa 360  
gcgttggtta caatgacatt tggtcttggt gacctgaggg aaaggcaaca ttgacttaaa 420  
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<210> 1295

<211> 545  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI237207

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 aagtgtgacc agactgtaag cggaagagct atagtgaatc caactttaga gggtacgttg 360  
 tgacaagcga actgtttttg tttctgaagc tttactaata taccagagca ttggcgacgt 420  
 tgtttttacat ctgttgttta aaatagatga ttataacagg gcggggaact ttttctctgc 480  
 aagaatgtta catatttgtc agataagtga gtgacatttc ataccctgta tatatagaga 540  
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<210> 1296  
 <211> 540  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI237580

<400> 1296  
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 tctcattccg tctctacttt tcttaaatta taaaaaataa aatctgacgg ttttgatttc 180  
 agtttagata agggttgcca catttcagca ctccgaagtg tgggtcccca cctgtacaga 240  
 gcctcacatg ctacagagat ctctaaagca ccactgcaag actgagtgtg agtggttcagc 300  
 tagaaccgcc atgcctgcct tgcctcggag gtgttctttc cttgggattc gatgacaatg 360  
 acagtaattt tgtttttctc cttcagttta gaccctctcg tctttgccac catttgacca 420  
 tctctgcagg cgtgattatt ttaaccagtc atttattcat ttgatagtga ggggtataatc 480  
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<210> 1297  
 <211> 610  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI237609

<400> 1297  
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 acatggtggg caggaagggg ttcggctgga agggatctga ggggtgggtg gcgtactgcc 180  
 caatgaaaat gcagttgggt tgttactgag cactactcat gggaagagag catcccaact 240  
 cctgctctat agaacgctgg gagtgaagt gatgcacca gatggaaaat gactgggaat 300  
 tggaagacgg agaggagtaa agtcaaatac acactgagtc actggcaggc taactgcaga 360  
 gaccaactct cacttaaaaa gctgggggct ggtgggggta atccaaacgc tgtaacaagt 420  
 gatattctct gaagattcaa gaggaggcaa ctcttctat ggtttgacct tcgcagcata 480  
 tttatacaca cacgcgaaca cacgcgaaca cacacacaca cacacacaca cacacacaca 540  
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ggaagcacia

610

<210> 1298

<211> 573

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI237614

<400> 1298

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cctaaaacaa atcccagata tcatatcgct ctgtgcacaa atgtttcagc ctttgtctct 180
aatatatgac cccttccctt aacaggatga taccagcatt ctgactgaaa atgttcataa 240
atatcttcac acagcaaagt ctgtcagggt cataactgtc tcatacatac tgtaagcttt 300
ctgtttgaac caggattcaa ataagggttca tgcattctct cagatgagag cattatggga 360
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gcctatctga tgatgggtca agccccgtga tctcttccca agagggcgtg gttcagaaaa 480
gtgctatctg atgggaaaca ctttgccctt ttgtaagggt ccatcaacag ttacaaagca 540
catttgaagt ctgggtcctt gtgccgaatt ctt 573
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<210> 1299

<211> 673

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI237618

<400> 1299

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agtgcgagga cttcagtggt tcatcttcag atataagggt ttagtccagt agtgctgtat 180
tctttaagga caaaagagca atagctatag gtaggaggt cactaagcta ggacagggct 240
ccaatttgca ggctcagaag cctggacatc taattatgca acggtagaaa ccaatgccct 300
ggcccagaac agctcgggtc ccccagggca ggtctatata taattctggt ttggtgtaat 360
tgggttcttg aatgtgttgt ttcccaggcc caggctcctg cctgccacta gactgactac 420
ctgtagtccc accctgtctc tcagaaaaga aggaagccag gcaagacagc agaggcccag 480
ggcaggggag tgaaagggcc aatttaatga aactacaaac tgggaccagg ccacagttca 540
cagtgatagg aggccatgca gtgtgtgaga ccaggagagg gacagcagca gggtacagcg 600
tccacatggg catattcaca gaccattcaa gaaatggaca ggtttgggct tacaccaggg 660
gcacgactca tgt 673
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<210> 1300

<211> 604

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI237636

<400> 1300

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cacacgagac aatgtattta atataaactt aagtatttag taagttatgc acatactgtg 120
ctgtcctcca gaagacaact gctcacaatt tccaccagc tgctaactta cttacatca 180
cctctaagaa aatcagccta gagagccctc ttgaagatgg ctttctaata tgaaatgaaa 240
agggcaaggg acgtaaaaagg cagcccaaca tcagtgaggg cctgggccta ttctggaaaa 300
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gctaacaaag cgctgtctaa agtgaacact cgtaaatac ccgcaggtga tttacagggt 360  
 taatgggtctc agacaaatca atcttctaca gaagatgagg tgactaggcc agtacaaaaa 420  
 ccatttctga atatatgcat gagagaaatt gtgtgtcaat gcacaagatg gccatgtgca 480  
 taaaaattac agagacatga aggtcacttc tgtgattttt attttagatg ttctttaaga 540  
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 cctc 604

<210> 1301  
 <211> 597  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI237698

<400> 1301  
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 ctgcataata caaacaagga acagatgttc tgttaaaaaa gactgctgtg aactattctt 180  
 aagactttta aaggtcttca tgactttaca gacatcttca cacacctttt ggtcctcaca 240  
 acaaccctgt gaggtaggaa ttaacatgat cattagcaga gcataaaata ggaaaatgag 300  
 atatacccag gcatacaatt agtaatctgc tactatctta gtgttgtgga ccttaggggt 360  
 tgtgttaaag cacaaagcat gaagtccgtt aaaatatgct ctgtttattc ccagagaggt 420  
 aacaacatgg gatattgaat ctttattatt actgcatttt attatcattc tcttgttatg 480  
 aattttcttc tttattataa cttatacaaa atatctccat ttctactgca atatttattt 540  
 cccagtatat atacttaaaa tataaaagggt aagcaaatac aaatagcttt ctagaaa 597

<210> 1302  
 <211> 592  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI237713

<400> 1302  
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 gcatcagtac aaaaaatcta agcagagaca gtagattagt aattagagca tcatgtagcg 180  
 ttgggttttag gaagaagcgt cacaggtaaa agaaggagca tatgacataa actcaaacat 240  
 gcaattcaaa tttacaaatt ataaaaattc accgctttta tagctggttt cttttgaatg 300  
 gctaaatttt agcctcattt ttttttcaat taaatgcctg ttaacaaacc aattggacaa 360  
 actcattttac ccaaattttac atcctagaat atgtaagtaa actgaagaca ttattcagat 420  
 gaataagttc tattcatttt catcatctct gtgatcaggt tgcaaaggac atgcttttct 480  
 ctttgccttt cctaagccac tgcttctctg ttcttcagga atctgggttt cttttttaga 540  
 atctttaagg gacaacctga agaattcccc gatgcctttt tgccacttgg ga 592

<210> 1303  
 <211> 563  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI237855

<400> 1303  
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 cagccatgtt gttattttatc aaagttcacc agaatatgta tactagccta agtttggttag 120

ccaaaagggg cttaagataa caagatacaa ctcttttattc aaaactctca aaatggggaa 180  
 tgataaagaa caggacaacc acactgatgt catctttgtt cttctacatg atattctctt 240  
 acgtctccca aacaagtgac aggaggattg agggacactt ccagaatggc taccatgttc 300  
 caggttctct gtgagatact ttgtgaaaat actctcccat ggtggacatg atcaatggca 360  
 ggttttatat aacaactcaa gagtccccca gaagttaaac ccaggaaatg ttggaccatg 420  
 gaaagagatt gaaaggagaa cttttaatta tgagaaaagg atccagtaag aatacactta 480  
 aacagatcaa taataatata tatctatatg ggattggaca aaggtttcat gagaaacaac 540  
 gacattactt gtattctaaa agg 563

<210> 1304

<211> 493

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI638994

<400> 1304

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 acactatata tacagcatgt ccaaattattc acaccactgc aaaataagga cgtttatatt 180  
 ttcacattaa cgtcaattat aaaattctga tgtgcccttt gaaactcagt caacaagtca 240  
 aaagaaaaaa atcaaaaacaa tgcttatttt ttaaaataac agttaattgt ctcttaaagt 300  
 atgaaatacc agtttggttt tatacatgaa tgattatatg acaaagacac ttactatgta 360  
 tttagtcttt catatttcaa aatacacaaat gcaatcatca taacgggctc catgatctgt 420  
 ctttacttga tgtatttagt attcacttat taaaatatac taaaatttga ttttaattta 480  
 tttttatggc aaa 493

<210> 1305

<211> 399

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI638998

<400> 1305

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 ctctcccaat gtaacgtctc atgttcgctc tgcaataaaa gagctcgtgg gtacctaagc 180  
 cgcacactgg acatctgtac tegtatgctt cagcaggaat tgtgtgacct aggaaacatc 240  
 tgtacacaga tgtaggccat gcggcataca cttctagtgc tcagctcgca accctgtggc 300  
 ctcttctaga ggagcaagta tgcaggaaca agggcagaag gccactctt ctgagatcca 360  
 cgtccttctt agaatacaaa ttctgggacc cagcggcag 399

<210> 1306

<211> 448

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI639029

<220>

<221> unsure

<222> (1) .. (448)

<223> n = a or c or g or t

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 agctcaggct gcctctgcca tgctgggggc ttcccaaagc agccagagag atttctctgc 180  
 accacctcag cctctacaga agttctggct ggggaaagac tcgctgagcc tccgtggcta 240  
 accaggcttt ctgacccaag atcaggcacg gtggccctcg gctgggcttg ctgaccgaac 300  
 atccagacag aggtttctcc tttggcaggg cctgcctcag agccaggctc catttgctgc 360  
 acagtccaag aagccatcat ctcaggagcc ttccccagac ttcactgaag gctgtacagc 420  
 cacctnctcg atctgccagc gacacatg 448

<210> 1307

<211> 392

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI639042

<400> 1307  
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 acaagttcaa acatttctac atacaacatt tttagggttt catttaccaa aaacaaaata 180  
 gtacaagttt tgctgccctg atatatacat caaaataaat acttttaatt gtggaaaata 240  
 gaaatcaaat ttcttaacat tataacaaca aatagtttac cctgaatttg tagtatcttt 300  
 ttgttaaaaa ataaatttac ttaatcttaa atttaagtca atgtacttta atgcttttta 360  
 aaaagagaca aaatactaaa ggacagggtt ac 392

<210> 1308

<211> 388

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI639055

<400> 1308  
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 atttagaacc ctctggcagg accaaacatc cggttaactt taaaaaaggg gggcccaaat 180  
 tttttgtaaa agcccaggcc agtttgtaa agggaacccc tgtggggaaa ttttctttcc 240  
 cccatccgtt tttaaaaaac atttttttac caaaaccgtg gaattgaaca aaaaaagggg 300  
 aatggggccc atttcccaa atttcacaaa aaaaaggagc cggggaaccc ggggttttat 360  
 ccaaaggctt tgtgtttgaa aaaaaaaaa 388

<210> 1309

<211> 533

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI639101

<400> 1309  
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 ccttcattca gtatgtgat ttacattctt ggtggttcaa ggggagtaga gatacactta 180  
 gaaccataag cagctcacag cagacatttt aggcactgga gacttggctc gaggttagaa 240  
 acatggagtc aagttagggt cccagggtct gtgacaggag gctcacagcc agctccaggg 300

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cgtcagacac ccgcggactc ggcattgtatc tatctgtatt cacatgcaca cactccttca 360
cagatacata cacacatatc agagctaaaa tatttgctgg gcagtgggtg tgtgtgcctt 420
taatcctagc actcgggagg tagatctttg agtttgaggc tagcctgggc tacagagtga 480
gtttcaggat atccagggct atacagagaa accctgtcct gagaaagaga aaa 533
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<210> 1310

<211> 413

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI639108

<400> 1310

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agggaggcgg gacagcaggg ggcaggcaca gaagcaacag gaagttgaaa attcacatct 120
tcaaacacaa gaaggaagca gaaagggggg gtgaggagaa agcagtgttt gatatttcct 180
acacacacat gtcaacattc accgttctta gaccactgag tcaggctctg acatccttct 240
gagcctcaca aggggaatggt tttgccattc ccatgaggcc atgcactgag gtactaaaca 300
tggtctgtggc catgtcaaca acatagcccc actctggacc tctctctaga cactgtaaag 360
aggacaggag gaccccatgc atgtaactat ggggaaagct atcattcgcg ctg 413
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<210> 1311

<211> 411

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI639151

<400> 1311

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ttaaaaaaga tgacaaagga tgttaatctt tttttattat tatcattttt acatattttg 180
gaacctcaca taattttgat aaataactct taaaaaatta tgcaaaaagt acaagaatgt 240
ctggtaaaca aacagtctgt attttccaaa agaattttt acaacatgca attcttaagg 300
cagcatcctc tttacaagggt aatcctttta ctcatcaaat cttctgctgc aaagaatagg 360
ctaagcaagc ctggcttctt ccattaacgc cttttgtctt tcctgtctga t 411
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<210> 1312

<211> 447

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. AI639158

<400> 1312

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tcttggttga gtctaaagca ctgcacaggg acttgagact ggggtctact cgatggctgt 180
ccgagacaac agtgaagcct gacagaagggt accctccacc tccactcatc aacaatttgg 240
gatgactccg atctggcaga acctggtaat ttctgagcca ggtttcagac agtctcagg 300
taatgactcc tcctctctcc cgcagttttg ttagcattc caacaaaggc tctttatact 360
gacaatagac cacaaacggc cttgatgggg ctacaaagtc cagcaaagac agcagcaggg 420
gtgtgggggt ggaaacgact ggccaca 447
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<210> 1313



<211> 393  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI639167

<400> 1313  
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 tcatcctcag ctgttcaact taactgcaag gccagtatgt tcctgtcgtc tcaaagctgc 120  
 acctggggaa gcatgagcga tggcctcagc ctgcagcaag tgggtggatc gcctgtgcac 180  
 aacaagctgg agcggagatt ggtggggctt gcacacccct ttcattccga ttgctttaa 240  
 tactggacac agcctttgca cagtggcccc tgtggccacc tatgaacact gcaagtgtag 300  
 taaccggatg tgtgtgggca aacaccttct aaaccacacc agtgtaccg atagccagag 360  
 cctaggatca cagtatagag aggtgactca ggg 393

<210> 1314  
 <211> 461  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI639281

<400> 1314  
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 gttgtaggat atttagcccc acccctttga ggaattggag gacgtttaac tccaccctt 180  
 ttatgtatca cagtgggtcag cagtgttgcc tcctactttt aaggctgaca ctaaagccga 240  
 gttcagagtt gctaaatagc tcctaagtgg aagatgggta gcaaccacag ctaagaacct 300  
 ctggattggg cagggccatc ttcttgtgtt tctgtgggtc aggccaatgg acgtcaatgg 360  
 ccagggatgt cagttcactg ggggcatttg ctctgatcca ctgcccaga ggtttgggca 420  
 tgaagttgcc cctctcatct ctatcagatt gtggtagaac a 461

<210> 1315  
 <211> 570  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI639310

<220>  
 <221> unsure  
 <222> (1)..(570)  
 <223> n = a or c or g or t

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 aggtttgtag acaatataca cagtgtatga tccccattgg aaaggcaaga aaccaaactc 180  
 aaggttttta gtttggaat tagcaaaaaga aggttgtacg atcttacgaa aataccgcag 240  
 accactgacc tatgttttag gacgtgaatt ttatgggttg taccctgtga agtccggcag 300  
 gcggtgcgtg acgtttttac gtggcagata tctgtggagt agcgggcaga atcagagcca 360  
 cactgtcaag tgcagtcctg taatcccagc acatgagaac ctgaggagga ccatccagaa 420  
 tctacagcct gagctattta tgcactgagt ccaagactgc ctggggctat acggtgaggc 480  
 gctctcagtc agtcaactga tcaatccatc agccgaccag ccacagnctt taatacaaa 540  
 ataccttaat aaacagaggt gaacgtctac 570

<210> 1316  
 <211> 401  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. AI639488

<400> 1316  
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 gagcacaatc atttgatcg gctgtctgca cacggggcag ggcttattcc tcttcttttag 180  
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 <213> Rattus norvegicus

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<212> DNA

<213> Rattus norvegicus

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<213> Rattus norvegicus

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<223> Genbank Accession No. D12770

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<213> Rattus norvegicus

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<213> Rattus norvegicus

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<400> 1329

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<213> *Rattus norvegicus*

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<213> *Rattus norvegicus*

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<220>

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<213> Rattus norvegicus

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<213> Rattus norvegicus

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<223> Genbank Accession No. D42148

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<212> DNA

<213> Rattus norvegicus

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<212> DNA

<213> Rattus norvegicus

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<223> Genbank Accession No. D63704

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<213> Rattus norvegicus

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<400> 1345

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<210> 1346

<211> 1726

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. D87839

<400> 1346

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1726

<210> 1347

<211> 1156

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. D87991

<400> 1347

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<213> Rattus norvegicus

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<223> Genbank Accession No. D88250

<400> 1348

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<210> 1349

<211> 1743

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. D88666

<400> 1349

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<210> 1350

<211> 2696

<212> DNA

<213> Rattus norvegicus

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<212> DNA

<213> Rattus norvegicus

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<223> Genbank Accession No. E01524

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<210> 1352

<211> 654

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. E02315

<400> 1352

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gcagaactgc gccacgtcat gacaaacctc ggggaaaagc taacagatga agaagtagac 480
gaaatgatga gagaagcaga tattgatgga gacggacagg tcaactatga agaattcgta 540
cagatgatga ctgcaaaatg aagacctact ttcaactact ttccccctct agaagaatca 600
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<210> 1353

<211> 1458

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. E03229

<400> 1353

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```

<210> 1354

<211> 3225

<212> DNA

<213> Rattus norvegicus

<220>

<400> 1354

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agatcatttt ccaatgaatg ccttggtacc attggaccag tcacccctct tgatgcatca 180
gattttgcgc tggatattcg catgcctggg gttacaccta aagagtctga cacatacttc 240
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gccagcatgg atactgtcca ccatatgctg ctggttgat gcaatatgcc ctgcctccact 360
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<210> 1355  
 <211> 355  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. H31144

<220>  
 <221> unsure  
 <222> (1)..(355)  
 <223> n = a or c or g or t

<400> 1355  
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 caaacaggac aagtactggg gccgctgggg tctccctcca caccggggc ctggggccct 180  
 ggtccctgcc agagaagatc ctggcgcttc ttctgtttct nagccacttc aggtgtttaa 240  
 canttacaag atctaagacc agccaagccc gagttcacag tgaagccaca ggtcacattc 300  
 tgtccaacac tccacattcc tacaggggtt ccctgggaaa agggggcctg gtcct 355

<210> 1356  
 <211> 403  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. H31287

<220>  
 <221> unsure  
 <222> (1)..(403)  
 <223> n = a or c or g or t

<400> 1356  
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 ttggcccaaa aaggcaggcg aaactgagac accagtactc aactcacacc ttggagctga 180  
 agggccagtt aaggtggctc tagccataca gccccacctn cccttctct gnetnctcca 240  
 gctgtggccc atctggggac aacctgggtc catctccctt cggtcagacc gtgggaggag 300  
 agacttgggc tgcaatcctn cctcaaccag gggatgtagc aaggattccc caggggncac 360  
 aaagtgcctc tgaaaggctt cccctggcgg agggaggacag cgg 403

<210> 1357  
 <211> 283  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. H31620

<400> 1357  
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 aaggatcaga ttattgagat ggcttgtctg ataactgact ctgaccttaa cattttggct 120  
 gaaggtccca acctgattat caaacagccg gatgagttgc tggacagcat gtcagattgg 180  
 tgcaaggagc atcacgggaa gtctgggtctt accaaggccg tgaaggagag tacagttaca 240  
 ctgcagcagc cagagtatga atttctgtcc tttgtacgac agc 283

<210> 1358  
 <211> 438  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. H31813

<220>  
 <221> unsure  
 <222> (1)..(438)  
 <223> n = a or c or g or t

<400> 1358  
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 gaggaagagg cctgcaagtn agaggctcag gagaagccaa atcactgaca cccagagctg 120  
 gttagggtgg gatggacaag atctgagcga ttcctcttct ggaggaggga acgaacagtg 180  
 ctgctgaggc atgtnaccca cccagccaga cactcttcac agaacagttc tggagggtgt 240  
 ggtgaaggat gtccgtctcc atgcagggat ggggtgtcann ngaggaaggg aggagtttat 300  
 cagaaggcaa gaggaagtaa caaactgaga ggagcggagg aggaggaaag cagttaagct 360  
 gccttcgtct gcaagcctcc aggatggcac ggaagatggc tgcagccgag acttctccag 420  
 gatctggctg atctagtt 438

<210> 1359  
 <211> 275  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. H32584

<400> 1359  
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 ggcttttgc ttttggtggg gtgagagccc tagctcccag ctcccctcac actacctttt 180  
 gacactaaga cggaagggtt ctaagttgca ggaacaggat gaaaattctt tactaccctc 240  
 ttcaactttt aggatgggca cttgggagtg tgagg 275

<210> 1360  
 <211> 437  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. H32867

<220>  
 <221> unsure  
 <222> (1)..(437)  
 <223> n = a or c or g or t

<400> 1360  
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 taacttcac ctgtcatgcy ggctagtggg ggtgaaccat tacctggcat ttnanttttt 180  
 tgcggaagaa tattatcctt tctctgaggt cctggcctac ttcacattct gctgtggat 240  
 aatcccgttt gctttcttcg tgtcactctc ggctggggag aatgtcctgc cctccaccat 300  
 gcagccaggc gatgacgtgg tctccaatta cttcaccaaa ggcaagcgaa ggcaagcgct 360



taggcacccct ggttggttttc tccttcatca aagaggccat cctacccagt cggcagaaga 420  
tatactgacc ctttggg 437

<210> 1361  
<211> 396  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. H32977

<220>  
<221> unsure  
<222> (1)..(396)  
<223> n = a or c or g or t

<400> 1361  
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aaataaacac tcagcaaat gtctctnggt agcatccagc accactgcag ttaaagtatg 120  
gcatacgtgt ggtatcacca tgctcgtctt ccccgctccc aaggatggca ggacagggac 180  
atcagctttc caaaccaaac tgctcatcatt cattgctatc cctttcttta ccatttaaca 240  
tacagngaac acacttcaat ggaatagact aataagccaa gagctttatt gatgcagcag 300  
gcactttaca atgganccca agagagcctg ccttctctga gaagacagga tgtctgtaca 360  
aactctcatc aggttttttc cacttcagaa cccaag 396

<210> 1362  
<211> 381  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. H33219

<220>  
<221> unsure  
<222> (1)..(381)  
<223> n = a or c or g or t

<400> 1362  
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acccttggggc atgcatatta acccgtaga ggttcttcta catgtctctc ctgcttccat 120  
aggaattgcc ccaaagcttt aaaaccaca gcttggtttt ttgttttttt actgtatata 180  
cagcctaaac catagcaatc taggattatg tcattttaca ctgtgcaaaa tcctcaaaaa 240  
atagtggat gacagagcag aaagatctct acaaatttca ttttaagaca ttcatataat 300  
tnggtccttc tccaaatcac accaattaaa acaggcacat tctctgtcaa gcctccagtc 360  
acgncctgac agtgatcccc g 381

<210> 1363  
<211> 422  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. H33426

<220>  
<221> unsure  
<222> (1)..(422)

<223> n = a or c or g or t

<400> 1363

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cagacctcat agatggttgt nagccactat ggggttggtg ggaattgaac ttaggacctc 120
tggaagaact actgggtgct atcactcaga cccagggttt tgggagagac agtgtcctgt 180
gtagcctata actgattagg aatttgaatc tcttctgcct ccacctacca catgctggga 240
tgactgctaa gagttgtagc ttccagaaaag gatgaacatt aagacctttg tgcttctgta 300
acagaagtta aagaaccatg ggaacattac tttggtttca acaggatggt gtttgttcaa 360
ggctgagagc ctcaagttag caatttagca gagtctgtat acaaacagat ttaccactgg 420
gg                                                                                     422
```

<210> 1364

<211> 569

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. H33491

<220>

<221> unsure

<222> (1)..(569)

<223> n = a or c or g or t

<400> 1364

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atagctctga ccctccaaaa ctgttcgagg agaaggagga agaggaggag gaggattcga 180
gtcttctggt aagcggggag agcgcctcct cagacaggtc tcagctcact ctccgtctct 240
ttagttatgc ttgctcttaa ttttcatgac tttgtgtgcc agcatgctct gagcgtttgt 300
nagatgcttg atggcatcaa acacaaggat gcccggtatc accaaccata tggcattcat 360
gataacgaag taggaaccag aaataaaggg ggtgacctag ctctccatgc tggaatccat 420
cgcgaggatt ggtcaggaag tacagcacat ccccatatat ctggcccaca gacaccacaa 480
gctgtaggac aaagcggaag ggtttgatga cggagaaagg cgatcaccac ccataggctn 540
agtgggtccc cagagacaag ctgtgacaa                                                                                     569
```

<210> 1365

<211> 299

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. H33832

<220>

<221> unsure

<222> (1)..(299)

<223> n = a or c or g or t

<400> 1365

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ttggtggaga gttccaccct gggcttcttc gtgctcaacg gctacaagtt ccagcnggcn 240
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<210> 1366

<211> 335  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. H33842

<220>  
<221> unsure  
<222> (1)..(335)  
<223> n = a or c or g or t

<400> 1366  
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acctccaaag ggagaagaag gttctgatga tgatgaaaca gaaaatggcc ccaaaccaaa 180  
gaagcgcctg ccaccgagag cagagaaaaa gaaggctccc aagccagaac gcctgcntcc 240  
ttcantgaaa ggaaaaataa aatccaaagc cattatatca tcaagcgatg attcttcaga 300  
tgaggataaa ctgaaaattg cttgatgaag gacat 335

<210> 1367  
<211> 294  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. H34047

<220>  
<221> unsure  
<222> (1)..(294)  
<223> n = a or c or g or t

<400> 1367  
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<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. H34186

<220>  
<221> unsure  
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<223> n = a or c or g or t

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<211> 405

<212> DNA

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<223> Genbank Accession No. H34687

<220>

<221> unsure

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<211> 684

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. J00728

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<210> 1371

<211> 950

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. J00735

<400> 1371

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<210> 1372

<211> 948

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. J02962

<400> 1372

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<211> 2052

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. J03190

<400> 1373

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<210> 1374

<211> 573

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. J03627

<400> 1374

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<211> 1444

<212> DNA

<213> Rattus norvegicus

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<223> Genbank Accession No. J03863

<400> 1375

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<210> 1376

<211> 5224

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. J03914

<400> 1376

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<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. J04943

<400> 1377

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<213> *Rattus norvegicus*

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<400> 1378

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<211> 1362

<212> DNA

<213> *Rattus norvegicus*

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<400> 1379

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<210> 1380

<211> 263

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. K01878

<400> 1380

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<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. K02814

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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. L07073

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<211> 643

<212> DNA

<213> Rattus norvegicus

<220>

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<211> 2455

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. L16764

<400> 1386

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<210> 1387

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<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. L16995

<400> 1387

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<210> 1388

<211> 494

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. L18948

<400> 1388

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<210> 1389

<211> 952

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. L19698

<400> 1389

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<211> 606

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. L22190

<400> 1390

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<210> 1391

<211> 1363

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. L22339

<400> 1391

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<210> 1392

<211> 2015

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. L24207

<400> 1392

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<211> 2643

<212> DNA

<213> Rattus norvegicus

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<211> 800

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. L26292

<400> 1394

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<211> 2638

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. L27843

<400> 1395

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<211> 377

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. M12112

<400> 1400

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<210> 1401

<211> 1161

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. M12822

<400> 1401

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<211> 809

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. M13234

<400> 1402

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<211> 1961

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. M13506

<400> 1403

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<210> 1404

<211> 2639

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. M14369

<400> 1404

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<210> 1405

<211> 2719

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. M15428

<400> 1405

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<211> 805

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. M15562

<400> 1406

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<211> 982

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. M15883

<400> 1407

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<220>

<223> Genbank Accession No. M18527

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<211> 1159

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<213> Rattus norvegicus

<220>

<223> Genbank Accession No. M18529

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<213> *Rattus norvegicus*

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<213> Rattus norvegicus

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<211> 857

<212> DNA

<213> Rattus norvegicus

<220>

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<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. M86235

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<210> 1428

<211> 787

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. M86389

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<210> 1429

<211> 2028

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. M95762

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<210> 1430

<211> 1329

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. M98820

<400> 1430

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<213> Rattus norvegicus

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<223> n = a or c or g or t

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<210> 1432

<211> 2190

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. S46785

<400> 1432

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<212> DNA  
<213> Rattus norvegicus

<220>  
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<210> 1434  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. S56937

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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. S69316

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<210> 1436  
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<213> *Rattus norvegicus*

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<223> Genbank Accession No. S71021

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<210> 1437

<211> 1052

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. S72505

<400> 1437

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<212> DNA

<213> *Rattus norvegicus*

<220>

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<220>

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<400> 1439

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 <213> Rattus norvegicus

<220>  
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<210> 1442

<211> 2533

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. U01344

<400> 1442

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<211> 3378

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. U01914

<400> 1443

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 <213> *Rattus norvegicus*

<220>  
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<210> 1447  
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 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. U06230

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<210> 1448

<211> 2226

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. U07201

<400> 1448

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<210> 1449

<211> 2207

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. U10357

<400> 1449

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<210> 1450  
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 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. U10697

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<210> 1451  
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 <212> DNA  
 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. U17035

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<210> 1454

<211> 3628

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. U20796

<400> 1454

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<400> 1456

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<210> 1457

<211> 1740

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. U25137

<400> 1457

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<211> 2746

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. U48220

<400> 1463

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<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. U55765

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<211> 1451

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. U58466

<400> 1466

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<210> 1469
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<212> DNA
<213> Rattus norvegicus

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<220>
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<211> 339

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<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. U64705

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<210> 1471  
<211> 3718  
<212> DNA  
<213> *Rattus norvegicus*

<220>  
<223> Genbank Accession No. U67138

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<211> 1765

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. U68168

<400> 1472

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<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. U72632

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<210> 1474
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<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. U73174

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gtaatgtgga acacagccgt gcaactcgga ttcatacatg atcacgtgga ttacggcttt 240
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0972300-072101

<211> 178

<213> Rattus norvegicus

<223> Genbank Accession No. U75404

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<211> 187

<213> Rattus norvegicus

<223> Genbank Accession No. U75405

<221> unsure

<223> n = a or c or g or t

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<211> 3348

<213> Rattus norvegicus

<223> Genbank Accession No. U75916

<220>  
 <221> unsure  
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 <223> n = a or c or g or t

<400> 1477

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<210> 1478

<211> 2176

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. U77038

<400> 1478

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aaaaaaaaa ctcgag 2176

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<210> 1479

<211> 1038

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. U77931

<400> 1479

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<210> 1480

<211> 3435

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. U83112

<400> 1480

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<210> 1481

<211> 3622

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. U88036

<400> 1481

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3622

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<210> 1482

<211> 1360

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. U94708

<400> 1482

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gatgacgtga tgacggggcc ctttgtggta agtgtcagag gatgcataaa gttcacatcg 1320
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<210> 1483

<211> 624

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. U95001

<400> 1483

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<210> 1484

<211> 1574

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. V01225

<400> 1484

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gacatgggtg cgaggtgcaa caatgttggg gtccggattt atgtggatgc tgtcattaat 360
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<210> 1485

<211> 735

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. X02904

<400> 1485

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<210> 1486

<211> 1592

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. X03369

<400> 1486

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<210> 1487

<211> 927

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. X05566

<400> 1487

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<210> 1488

<211> 696

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. X06423

<400> 1488

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<210> 1489

<211> 1495

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. X12459

<400> 1489

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<210> 1490

<211> 1422

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. X13016

<400> 1490

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<210> 1491

<211> 1627

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. X13058

<400> 1491

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<213> Rattus norvegicus

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<223> Genbank Accession No. X14181

<400> 1493

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<213> Rattus norvegicus

<220>

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<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. X51529

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<212> DNA

<213> Rattus norvegicus

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<223> Genbank Accession No. X51615

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<212> DNA

<213> Rattus norvegicus

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<212> DNA

<213> Rattus norvegicus

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<400> 1499

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<212> DNA

<213> Rattus norvegicus

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<212> DNA

<213> *Rattus norvegicus*

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<223> Genbank Accession No. X58389

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<211> 497

<212> DNA

<213> Rattus norvegicus

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<211> 15231

<212> DNA

<213> Rattus norvegicus

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2141

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<213> Rattus norvegicus

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<211> 1780

<212> DNA

<213> Rattus norvegicus

<220>

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<211> 1632

<212> DNA

<213> Rattus norvegicus

<220>

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<400> 1522

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<213> Rattus norvegicus

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<213> Rattus norvegicus

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<220>
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<212> DNA

<213> *Rattus norvegicus*

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<211> 1632

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. Y15068

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<212> DNA

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<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_012580

<400> 1547

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<211> 2352

<212> DNA

<213> Rattus norvegicus

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<211> 1605

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_012597

<400> 1549

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<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_012600

<400> 1550

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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. NM\_012603

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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. NM\_012615

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<210> 1553

<211> 487

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_012618

<400> 1553

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487

<210> 1554

<211> 3160

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_012624

<400> 1554

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<210> 1556

<211> 2462

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_012649

<400> 1556

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<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_012674

<400> 1558

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 <213> Rattus norvegicus

<220>  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_012693

<400> 1561

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<210> 1562

<211> 1936

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_012699

<400> 1562

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<210> 1563

<211> 3320

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_012716

<400> 1563

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<212> DNA

<213> Rattus norvegicus

<220>

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<400> 1564

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<213> Rattus norvegicus

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<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_012744

<400> 1566

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<211> 2142

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_012749

<400> 1567

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 <211> 1843  
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 <213> *Rattus norvegicus*

<220>  
 <223> Genbank Accession No. NM\_012766

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<210> 1569

<211> 2335

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_012770

<400> 1569

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<211> 4835

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_012789

<400> 1570

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<220>

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<212> DNA

<213> Rattus norvegicus

<220>

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 <213> *Rattus norvegicus*

<220>  
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 <213> *Rattus norvegicus*

<220>  
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<210> 1596
<211> 1689
<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. NM_013052

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<210> 1597
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<212> DNA
<213> Rattus norvegicus

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<220>
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<211> 1519

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_013078

<400> 1598

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<210> 1599

<211> 2153

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_013082

<400> 1599

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<210> 1600

<211> 607

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_013086

<400> 1600

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<211> 2130

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_013091

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<210> 1602

<211> 554

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_013102

<400> 1602

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<210> 1603

<211> 2528

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_013113

<400> 1603

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<210> 1604

<211> 6822

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_013119

<400> 1604

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<223> Genbank Accession No. NM\_013120

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 <213> Rattus norvegicus

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<213> Rattus norvegicus

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<211> 1200

<212> DNA

<213> Rattus norvegicus

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<223> Genbank Accession No. NM\_013154

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<213> Rattus norvegicus
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<210> 1611

<211> 1911

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_013185

<400> 1611

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<210> 1612

<211> 2389

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_013198

<400> 1612

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<211> 2826

<212> DNA

<213> Rat

<220>

<223> Genbank Accession No. NM\_013200

<400> 1613

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<210> 1614
<211> 1523
<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. NM_013214

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<210> 1615
<211> 1272
<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. NM_013215

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<210> 1616

<211> 1088

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_013216

<400> 1616

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<210> 1617

<211> 1866

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_016986

<400> 1617

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<210> 1618

<211> 4269

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_016987

<400> 1618

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<213> Rattus norvegicus

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<213> Rattus norvegicus

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<212> DNA

<213> Rattus norvegicus

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<213> Rattus norvegicus

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<220>

<223> Genbank Accession No. NM\_017039

<400> 1624

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<211> 1843

<212> DNA

<213> Rattus norvegicus

<220>

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<400> 1625

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<210> 1626

<211> 1663

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017047

<400> 1626

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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. NM\_017060

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<212> DNA

<213> *Rattus norvegicus*

<220>

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<212> DNA
<213> Rattus norvegicus

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<220>
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<210> 1631
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<212> DNA
<213> Rattus norvegicus

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<220>
<223> Genbank Accession No. NM_017075

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<210> 1632

<211> 2171

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017076

<400> 1632

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<210> 1633

<211> 988

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017084

<400> 1633

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<210> 1634

<211> 693

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017096

<400> 1634

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ctggaagcag agtcaaagaa gccactggaa gccttcactg tgtgtctcta tgcccacgct 180
gatgtgagcc gaagcttcag catcttctct tacgctacca agacgagctt taacgagatt 240

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<210> 1635

<211> 838

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017126

<400> 1635

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<210> 1636

<211> 2540

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017127

<400> 1636

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<210> 1637

<211> 1039

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017147

<400> 1637

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<210> 1638

<211> 801

<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. NM\_017160

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<210> 1639  
<211> 1679  
<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. NM\_017177

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gagcaccgcg aggcgttaag cctaaccgag tccacgtcat ggcggcggat gggacagggtg 300  
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gagcctatca gtgggtgccg gagtacctgg gcggagcctg gcgcagagcg cgcccgagg 480  
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<210> 1640

<211> 1386

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_017181

<400> 1640

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<210> 1641

<211> 1072

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_017187

<400> 1641

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<210> 1642

<211> 1290

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017189

<400> 1642

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<210> 1643

<211> 1828

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017193

<400> 1643

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<210> 1644

<211> 2622

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_017208

<400> 1644

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<210> 1645

<211> 1176

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017220

<400> 1645

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<211> 2227

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017224

<400> 1646

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<211> 2646

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017274

<400> 1648

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<210> 1650  
 <211> 852  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. NM\_017279

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 aaagctgcaa atggcgtggt attagccact gagaaaaagc agaaatccat cctgtatgat 180  
 gagaggagtg tacacaaagt ggagcccata accaagcaca tcggtttggt gtacagcggc 240  
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 cttgtttacc aagaacccat tcccacagcc caactggtag agcgagtagc gtctgtgatg 360  
 caagagtata ccagtcagg tgggtgttcgt ccatttggtg tttctttact tatttgtggg 420  
 tggaatgagg gacgaccata tttatttcag tcagatccat ctggagctta ctttgcctgg 480  
 aaggccacag caatgggaaa gaactacgtg aacgggaaaa ctttccttga gaaaagatat 540  
 aatgaagact tagaactgga agatgcgatt cacacagcca tcttaaccct taaggaaagc 600  
 tttgaagggc agatgacaga agataacata gaagttggga tctgcaatga agctggcttt 660  
 aggaggctca cccaactga agtgagggat tacttggtg ctatagcgta atgaagatgt 720  
 gccggaacaa caaggaacac tcattctact tattcatttt taaagtatgt tttgtttgtg 780  
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 tgttaaaacc ag 852

<210> 1651  
 <211> 1121  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. NM\_017281

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 accacaatat tttctccaga aggtcgctta taccaagtgg aatatgccat ggaagccatt 180  
 ggacacgcag gcacttgttt ggggaatttta gccaatgatg gcgttctgct tgcagcagag 240  
 aggcgcaaca tccacaagct tcttgatgaa gtcttttttt ctgagaaaaa ttataaaactt 300  
 aacgaggaca tggcttgtag tgtggcaggc ataacatctg atgccaacgt tctgactaat 360  
 gaactcaggc tcattgctca aaggtactta ttacagtatc aggagccaat tcctgtgtag 420  
 cagttgggta cagcactgtg tgatatcaaa caggcgtaca cacagtttgg aggcaaacgt 480  
 ccctttgggtg tttctttgct gtatattggc tgggataagc actatggctt tcagctctat 540  
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 gctgcagcgg tatcaatgct gaaacaagac tacaaaagaag gagaaatgac tctgaagtca 660  
 gcgctggctc tggctgtcaa ggtgctaaac aagacaatgg atgttagtaa actgtcagct 720  
 gaaaaagtgg aaatcgccac actaacaaga gagaatggaa agaccgtgat cagagtcctc 780  
 aagcaaaagg aagtgggaca gttgatcaaa aaacatgaag aggaagaagc gaaagctgaa 840  
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<210> 1652  
 <211> 970  
 <212> DNA  
 <213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017282

<400> 1652

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aacacttttt ctctgaagg aagattattt caagtggaat atgccattga gggccataag 180
cttggttcta cgccattgg catccagaca tcagagggtg tatgtctagc tgtggagaag 240
agaattacct cgccactaat ggagcctagc agcattgaga aaatcgtaga gattgatgct 300
catataggtt gtgccatgag tgggctaatt gctgatgcta aaactttaat tgataaagcc 360
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accaggctg tgtccaatct ggctttgcag ttcggagaag aagatgcaga tccagggtgct 480
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ctgtttcaca tggacccatc tgggaccttc gtacagtgtg atgctcgagc aattgggttct 600
gcgtcagagg gtgcccagag ctcttgcag gaagtttacc acaagtctac gactctgaag 660
gaggccatca agtcttcaact catcatcctc aagcaagtca tggaggagaa gctgaacgca 720
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agtttcagtt ctaatggctc ttagacttta tttccaactc cacgtcgtga aaatatccag 900
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<210> 1653

<211> 932

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017283

<400> 1653

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aagtagaata tgcttttaag gctattaacc aggggtggact tacatctgta gctgtcagag 180
gaaaggactg cgcagttatt gtcacacaga agaaagtacc tgacaaacta ctggattcca 240
gcaccgtgac tcaattattc aagataacgg aaaacattgg ctgtgtgatg acaggaatga 300
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tctacacaca gaatgctgaa atgaggccac ttggtgtgtg tatgatttta attggtatag 480
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agagagactg aacactctta tcagcttacc agatccatga tgccatgtgc ctatgtgttt 840
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<210> 1654

<211> 1490

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017288

<400> 1654

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cgccccccca gcagcagctg cggcgcccg gcccgggcca gtcgcccgg gggcccatct 180
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gacaaggcca acagagatat ggcatccatc gtgtcagaga tcatgatgta cgtgctcatt 720
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<210> 1655

<211> 1879

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017300

<400> 1655

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tccagagcac tctgcatttc agagggtcgc tgtcgaacta cggttttggc gaagacattc 180
ctgaagaatt gtctgaggtt tcctctgcaa aaatggccaa gctgacagct gttcctctca 240
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tgtgccttca ggcatcactg aaagatgata agggaaacct gtttaattct caggccttct 360
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acatgggggt ccaccccatg ggtcttttct ggtccatgaa acctgaaaag ctattgacta 480
gattggtaaa aagagatgtg atgaataggc ccacaaaagt ccacataaaa ctttgccatc 540
catacttttc agtagaaggc aaagtatatca gttcctcctt ggatagtctg attctggaag 600
ggtggtatat ggcacctggt gtcactagga tccatgtaaa ggaaggccga atccggggag 660
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ttatcccaca cgcagctgcg caggaacatt cttggaagga gatacagaaa tttctcaagc 1440
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taaatatgct tagatcatc                                     1879

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<210> 1656

<211> 796

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017309

<400> 1656

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agattaaaag gctaggaaaag agattcaaga agcttgactt ggacaactct ggttctttga 180
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<210> 1657

<211> 2068

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017327

<400> 1657

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cgtaaagcag tacaagcctg tcgtctacag caacaccatc cagtctctgg cagccattgt 960
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<210> 1658

<211> 436

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_017334

<400> 1658

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gccacaggtg acatgccaac ttaccagatc cgagctccta ctactgcttt gccacaaggt 180
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cgaaagaaaag agtatgtcaa gtgtcttgag agtcgagtcg cagtgtctgga agttcagaac 360
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tagaaatatt taacta 436

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<210> 1659

<211> 722

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_019165

<400> 1659

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gcttgccaaa aggaagatga tgcttttcaa ctcgttttga aaaggaagga tgaaaatggg 540
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tattccagaa agacgattag tatacacgag ccttatgata acctactctg tattttctatg 660  
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<210> 1660  
 <211> 1018  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. NM\_019170

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 gtcacggggc cacgaggcgg tgaagcagct gcagaccgag ggcttgagcc cacgcttcca 240  
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 cagcgtgagt ctcagggccc tgaaaagctg cagcccggag ctgcagcaga agtttcgaag 540  
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<212> DNA

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<400> 1667

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<212> DNA

<213> Rattus norvegicus

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<212> DNA

<213> Rattus norvegicus

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<223> Genbank Accession No. NM\_019238

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<210> 1670

<211> 1736

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_019242

<400> 1670

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<210> 1671

<211> 1136

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_019262

<400> 1671

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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. NM\_019283

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<210> 1673  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. NM\_019289

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<210> 1674

<211> 1259

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_019290

<400> 1674

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cagttgagag gtttgctgag aaattgactc aaatacttca agagaaatac aaaaatcact 180
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<210> 1675

<211> 1459

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_019291





<220>

<223> Genbank Accession No. NM\_019293

<400> 1677

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<210> 1678

<211> 1768

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_019303

<220>

<221> unsure

<222> (1)..(1759)

<223> n = a or c or g or t

<400> 1678

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<210> 1679

<211> 1575

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_019354

<400> 1679

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<210> 1680

<211> 1377

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_019356

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<210> 1681

<211> 1932

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_019359

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<210> 1682

<211> 1395

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_019905

<400> 1682

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<210> 1683

<211> 546

<212> DNA

<213> Rattus norvegicus

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<223> Genbank Accession No. NM\_020082

<220>

<221> unsure

<222> (1)..(546)

<223> n = a or c or g or t



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<210> 1685

<211> 1574

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_021577

<400> 1685

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 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. NM\_021653

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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. NM\_021750

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<211> 1980

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_021754

<400> 1689

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<211> 1035

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_021836

<400> 1691

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<400> 1692

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<213> Rattus norvegicus

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<223> Genbank Accession No. NM\_022194

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<213> Rattus norvegicus

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<400> 1697

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<211> 3711

<212> DNA

<213> Rattus norvegicus

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<400> 1698

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<210> 1699

<211> 1617

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022298

<400> 1699

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<210> 1700

<211> 651

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022284

<400> 1700

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<210> 1701

<211> 940

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_021909

<400> 1701

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<210> 1702

<211> 2410

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022392

<400> 1702

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<210> 1703

<211> 1243

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022509

<400> 1703

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<210> 1704

<211> 2183

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022542

<400> 1704

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<211> 3719

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022543

<400> 1705

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<212> DNA

<213> Rattus norvegicus

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<223> Genbank Accession No. NM\_022584

<400> 1706

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<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022592

<400> 1707

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<210> 1708

<211> 2748

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022667

<400> 1708

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 <213> Rattus norvegicus

<220>  
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<212> DNA

<213> Rattus norvegicus

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<210> 1713

<211> 3239

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_022866

<400> 1713

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<211> 861

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022867

<400> 1714

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<210> 1715

<211> 3609

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022869

<400> 1715

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<210> 1716

<211> 1992

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022936

<400> 1716

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<210> 1717

<211> 715

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022949

<400> 1717

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<211> 1495

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022960

<400> 1718

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<211> 1408

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_024125

<400> 1719

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<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_024127

<400> 1720

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<210> 1721

<211> 2472

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_024132

<400> 1721

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<212> DNA  
<213> Rattus norvegicus

<220>  
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<210> 1723  
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<212> DNA  
<213> Rattus norvegicus

<220>  
<223> Genbank Accession No. NM\_024148

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 <212> DNA  
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<220>  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
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<211> 2640

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_024163

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<213> *Rattus norvegicus*

<220>

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<212> DNA

<213> Rattus norvegicus

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<400> 1728

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<211> 1506

<212> DNA

<213> Rattus norvegicus

<220>

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<400> 1730

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<211> 8329

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_019143

<400> 1731

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<210> 1735

<211> 1944

<212> DNA

<213> Rattus norvegicus

<220>

<223> Genbank Accession No. NM\_022539

<400> 1735

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<210> 1736  
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 <213> Rattus norvegicus

<220>  
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 <213> Rattus norvegicus

<220>  
 <223> Genbank Accession No. NM\_022515

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<220>

<223> Genbank Accession No. NM\_022526

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<222> (1)..(1440)

<223> n = a or c or g or t

<400> 1738

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<210> 1739

<211> 3564

<212> DNA

<213> *Rattus norvegicus*

<220>

<223> Genbank Accession No. NM\_017321

<400> 1739

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<212> DNA

<213> Rattus norvegicus

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<223> Genbank Accession No. NM\_022944

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